Maths 4 U

Fourth Grade

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Serie Maths 4 U

Libro metodología CLIL aplicada al aprendizaje y práctica de matemáticas en inglés como lengua extranjera.

Texto Sergio Velázquez García

Diseño Araceli Vanessa Cruz Maya

Edición Renzo Arzate Nava

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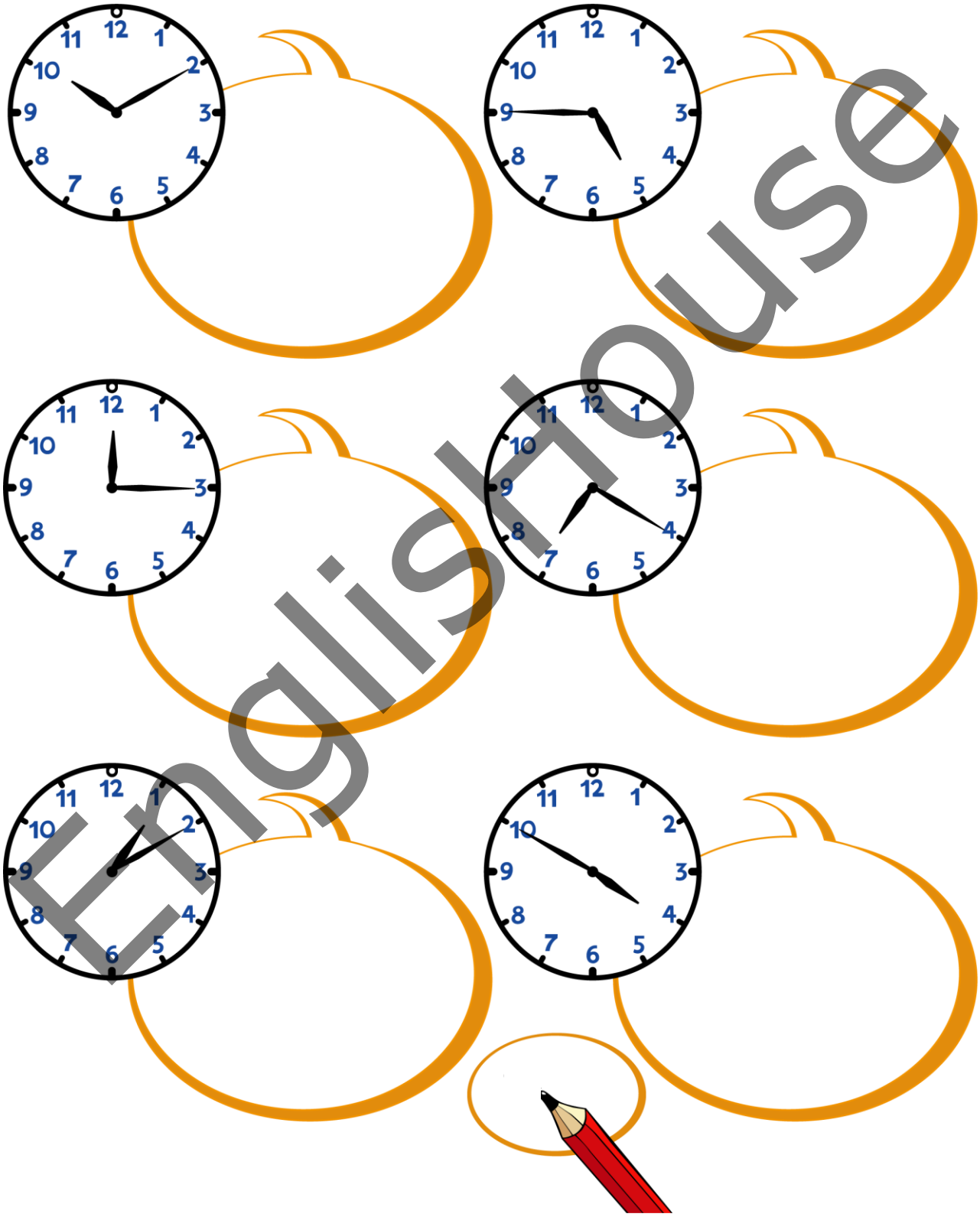
WHAT TIME IS IT?



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UNIT 1 Large numbers

Read and answer the question.
There was a flower festival in the city last month. In the festival there were displays of tulips and daffodils.

There was a total of 110 000 flowers. 70 000 were daffodils.
How many tulips were there?

Write the numbers in thousands, hundreds, tens and units.

6529 - **6 000 + 500 + 20 + 9**

8765 - .....

7123 - .....

2345 - .....

1998 - .....

Look and answer the questions.

9	5	1	4	3	8

a) What is the greatest number you can make? .....

b) What is the second greatest number you can make? .....

c) What is the third greatest number you can make? .....

Look and read. Then place the numbers in the correct section.

3	4	2	3	6	5

59 231 **97 871** **102 875** **672** **8 352**

Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....

Write the numbers from the previous activity as words.

a) .....
b) .....
c) .....
d) .....
e) .....

Read and write the numbers.

a) Two thousand two hundred .....
b) Twenty-one thousand three hundred and ninety four .....
c) Two hundred and forty - five thousand .....
d) Four hundred and thirty – two thousand six hundred and sixty – one .....
e) Three hundred fourteen thousand four hundred and fourteen .....

Order the numbers from the smallest to the largest.

3 586	2 798	1 562	3 249	2 942
.....	.....	.....	.....	.....
Smallest number	→			Largest number

28 105	87 941	66 543	28 258	56 287
.....	.....	.....	.....	.....
Smallest number	→			Largest number

655 946	474 311	265 782	322 634	432 920
.....	.....	.....	.....	.....
Smallest number	→			Largest number

Order the numbers from the largest to the smallest.

1 019	2 440	1 982	1 004	1 204
.....	.....	.....	.....	.....
Largest number	→			Smallest number

25 406	68 920	38 594	97 800	27 924
.....	.....	.....	.....	.....
Largest number	→			Smallest number

586 742	767 873	697 042	846 901	257 165
.....	.....	.....	.....	.....
Largest number	→			Smallest number

Look and read. Then write the value of the underlined numbers.

Millions	Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
7	4	0	0	9	2	5

a) 7 598 17<u>1</u> .....

b) 2 588 48<u>1</u> .....

c) <u>2</u> 104 744 .....

d) 9 <u>1</u>17 005 .....

e) 3 1<u>5</u>8 415 .....

Read and write the numbers on the lines. Then find their place in the puzzle.

a) Three hundred twenty seven thousand six hundred nineteen _____

b) Seven hundred forty one thousand ninety three _____

c) Two million nine hundred thirty six thousand eighty one _____

d) Five hundred forty two thousand seven hundred thirty _____

e) Eight million nine hundred one thousand four hundred seventy three _____

f) One million four hundred six thousand two hundred seventy one _____

g) Five hundred seventeen thousand four hundred nine _____

h) Twenty thousand three hundred fifty seven _____

		5					
			6				
							4
			3				
				7			
		9					

Word problems

Read and answer the questions.

In the local library there are 98 456 old books. The manager decided to add 7 876 new books.

How many books will there be in the library?

A store sold 23 500 bottles of water on Monday and 32 540 bottles on Tuesday.

How many bottles of water were sold on these two days?

The population of Green Land Town was 8 363 710 in 2008. It was expected to increase by 1 201 452 by the end of the next year.

What was the expected population of Green Land Town by the end of the next year?

You're up!

Read and help the pirate discover the route to the hidden treasure in the board below. Colour the correct digits and fill in the numbers at the end to find out how much the treasure is worth. Write the number with words as well.

A Colour the tens place

B Colour the thousands place

C Colour the millions place

D Colour the units place

E Colour the ten thousands place

F Colour the hundreds place

G Colour the ten millions place

H Colour the hundred thousands place

A	6	1	8	4	0	3	2	6
B	3	5	2	0	6	4	8	5
C	8	4	3	5	6	2	7	3
D	1	6	8	1	2	7	5	1
E	4	3	7	6	7	8	6	4
F	5	1	0	8	4	9	5	0
G	2	8	4	5	1	1	3	9
H	3	6	5	7	6	2	8	2

$ __ __ , __ __ __ , __ __ __

A B C D E F G H

The treasure is worth .....

.....

.....

Number patterns

Read and answer the questions.
A mathematics teacher invented a machine that prints series of numbers. Students have to type the numbers using a keyboard.

The first time they used the machine, they typed the number 710 and the following numbers were printed:

710 720 730 740 750

1. How does the machine work? .....

.....

2. If the pattern printed continues, what will the next number be? .....

.....

3. If students type the number "2 500," what will the next four numbers be? .....

.....

Look and count to find the missing numbers.

482 140		482 142	482 143		482 145
388 115		388 117	388 118		388 120
	234 563	234 564		234 566	234 567
12 460	12 461			12 464	12 465
3 978 497					3 978 502
8 978 499					8 978 504

Adding boxes

Read and complete.

481 359 →  → 481 _____ + 10 is _____

481 359 →  → 481 _____ + 100 is _____

481 359 →  → 482 _____ + 1 000 is _____

Read and complete the math sentences.

a) 10 more than 546 987 is .....

b) 100 more than 436 756 is .....

c) 1000 more than 653 120 is .....

d) 1000 more than 230 987 is .....

e) 10 more than 769 165 is .....

Look, add and write the final number.

765 433	+	10	+	100	+	1000	=	.....
908 372	+	10	+	100	+	1000	=	.....
876 344	+	10	+	100	+	1000	=	.....
123 324	+	10	+	100	+	1000	=	.....

Count in 10s, 100s and 1000s – write the missing numbers.

Count in 10s – 132 567 ....

Count in 100s – 876 453 ....

Count in 1000s – 987 321 ....

Count in 10s – 327 443 ....

Count in 100s – 456 765 ....

Count in 1000s – 657 322 ....

Guess the rule and write the next two numbers in the sequence.

123 678 124 678 125 678 126 678

Rule: _____ ....

675 739 675 749 675 759 675 769

Rule: _____ ....

393 176 393 276 393 376 393 476

Rule: _____ ....

101 234 102 234 103 334 104 334

Rule: _____ ....

You're up!

Look and add or subtract from the numbers on the left.

	1000 more	100 less	10 more	1000 less
Example 1 476	2476	2376	2386	1386
2 261				
56 852				
22 758				
324 663				

Multiplication

Read and answer the questions.

Saul and Rossy´s are going to a picnic with their friends. Their mum wants to prepare some fruit salad for all the kids to eat in the morning.

To prepare the salad, Saul and Rossy´s mum will need:

3 bananas

6 apples

2 oranges

$ 5

$ 10

$ 2

How much money does she need for the bananas? .....
How much money does she need for the apples? .....
How much money does she need for the oranges? .....
How much money does she need for all the fruit? .....
At this moment she has 50 pesos, how much money does she need to buy all the fruit for the salad?

Count the feet and say the number of toes.

Orange feet: ___ X ___ = _____ toes.

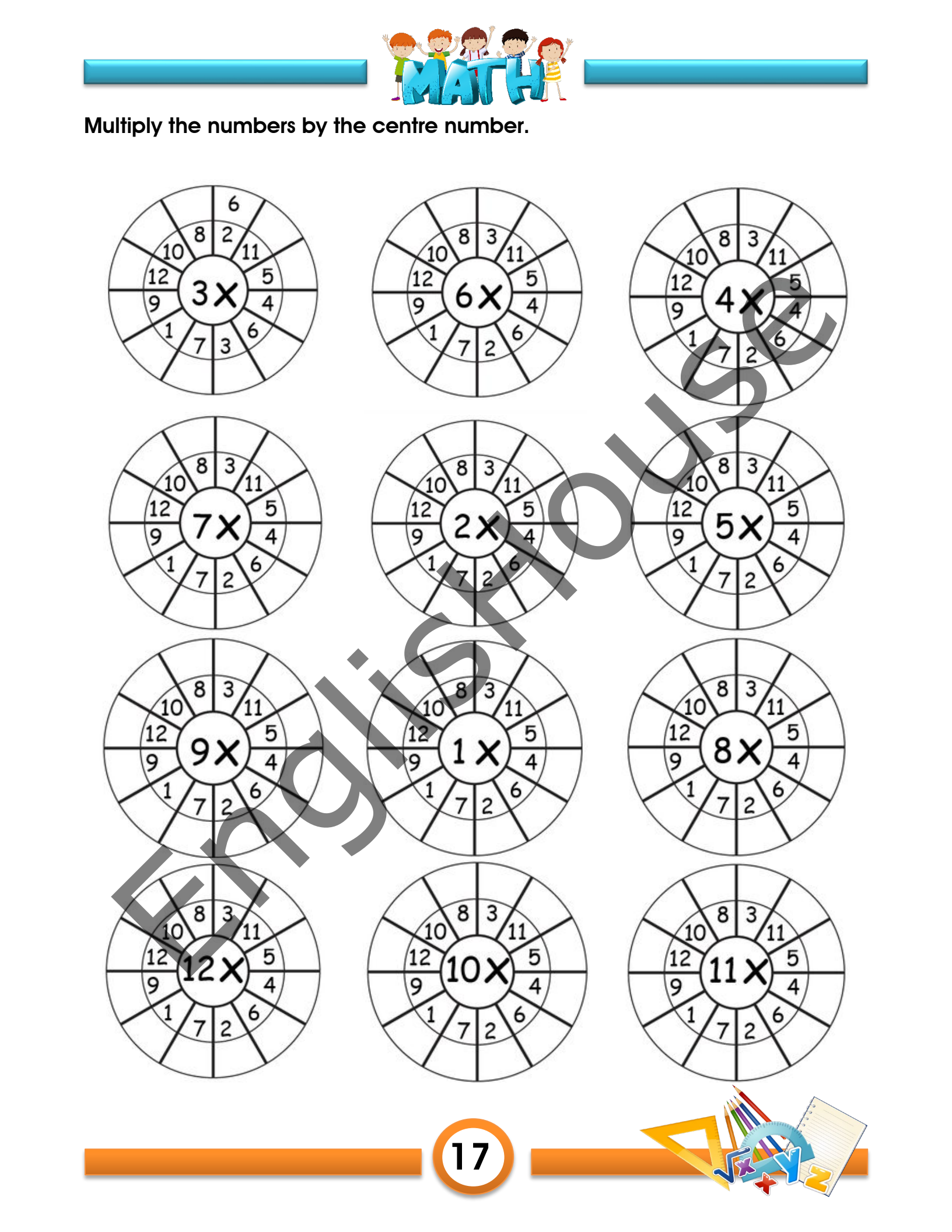
Purple feet: ___ X ___ = _____ toes.

Blue feet: ___ X ___ = _____ toes.

Green feet: ___ X ___ = _____ toes.

Grey feet: ___ X ___ = _____ toes.

All toes together = _____



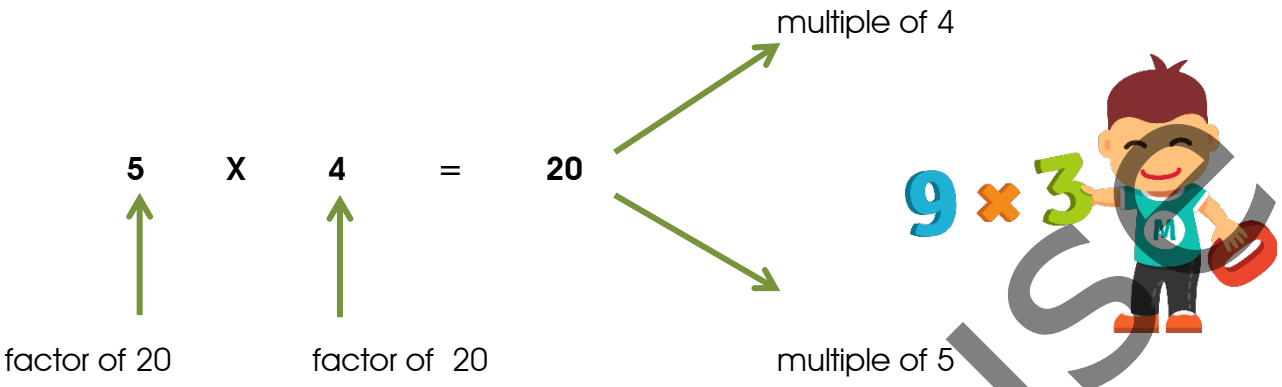
Multiply the numbers by the centre number.

Look and complete the multiplication table.

X	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
3	0	3	6	9		15		21	24	27		33	36	39		45
4	0	4	8		16	20	24	28		36	40	44		52	56	
5	0	5	10	15		25		35	40	45		55	60		70	75
6	0	6	12	18	24		36	42		54	60		72	78		90
7	0	7	14		28	35	42		56	63	70	77		91	98	105
8	0	8	16	24	32		48	56	64		80		96	104	112	
9	0	9	18		36	45	54		72	81	90	99		117		135
10	0	10	20	30	40		60	70	80		100	110	120	130	140	
11	0	11	22		44	55	66		88	99	110		132		154	165
12	0	12	24	36	48		72	84	96		120	132		156	168	180
13	0	13	26		52	65	78		104	117		143	156		182	
14	0	14	28	42	56		84	98		126	140	154		182		210
15	0	15	30		60	75		105	120	135		165	180	195	210	

Multiples and factors

Look and read.



Look, find and write.

Find the factors of 42.

Find the factors of 15.

Find the factors of 36.

Find the factors of 14.

List the first five multiples of the following numbers.

a) **5** .....

b) **12** .....

c) **22** .....

d) **16** .....

List the factors of the following numbers.

a) **15** .....

b) **24** .....

c) **100** .....

d) **64** .....

Draw lines to match the factor pairs.

Factors of 78

78 13 26 2

6 3 1 39

Factors of 64

2 8 64 16

1 32 4 8

Factors of 56

8 1 2 14

28 4 7 56

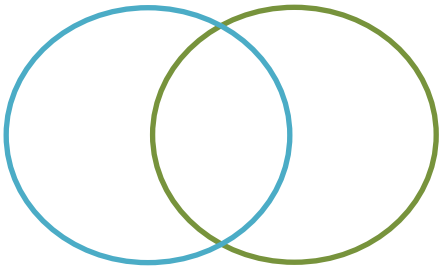
Factors of 72

24 36 18 6 8 72

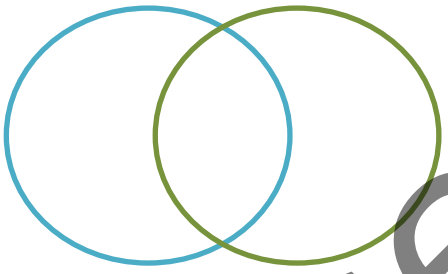
9 1 4 12 3 2

Find the greatest common factor.

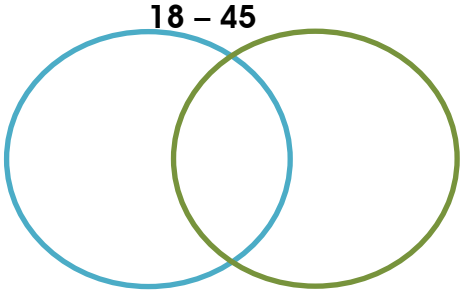
16 - 48



20 - 24

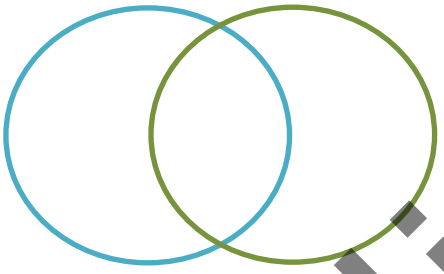


18 – 45

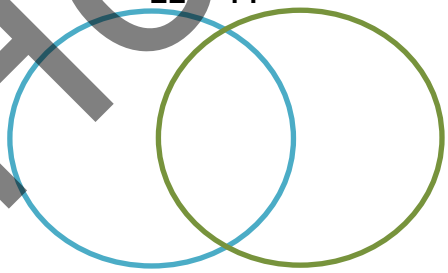


27 - 30

36 - 54



22 – 44

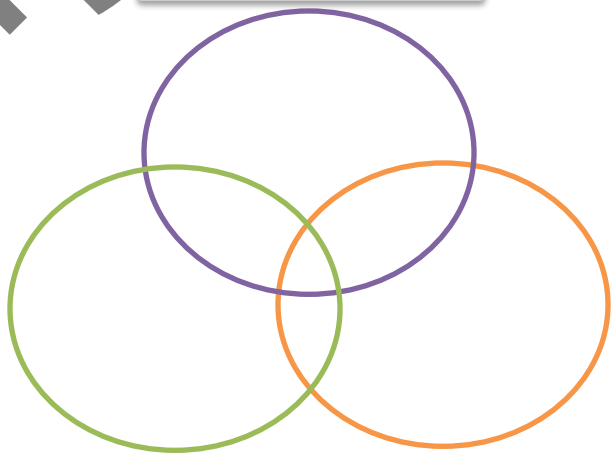


Write these numbers in the Venn diagram.

1	2	3	4	5	6
7	10	12	15	20	

Factors of 20

Factors of 15



Factors of 12

Word problems

Read and answer the questions.

1. There are 7 bunches of bananas. Each bunch has 13 bananas.

How many bananas are there in all?

There are _____ bananas all together.

2. A gardener has planted 8 trees in a row. If there are 14 rows, how many trees are there altogether?

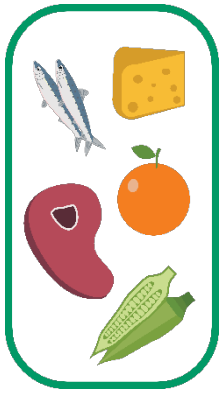
There are _____ trees all together.

3. There are 12 swings in the park. On each swing, there are 3 children. Find the total number of children.

There are _____ children all together.

4. John eats 3 meals a day. How many meals does he eat in one month?

He eats _____ meals in a month.



5. There are 12 baskets. Each basket has 11 apples.

How many apples are there altogether?

There are _____apples all together.

You're up!

Look and choose a number from each box. Adding the numbers will give you the result on the left and multiplying them, the product on the right.

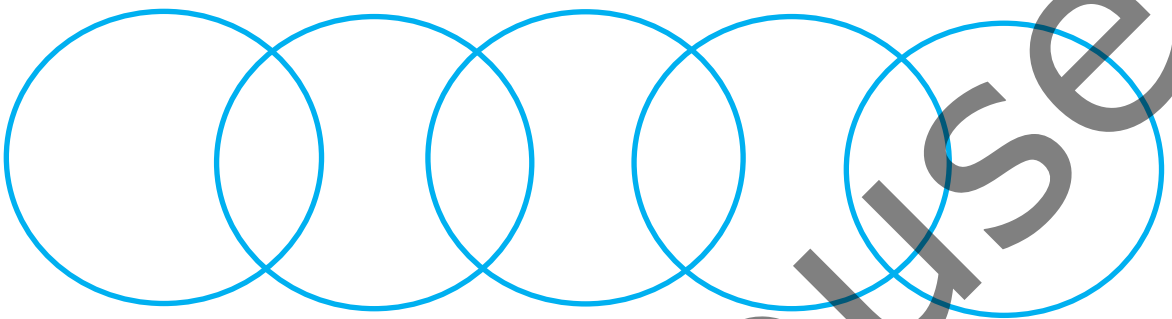
11	12	4	13	15	8	12	14

8	3	4	11	12	6	15	5

___ + ___	___ X ___	___ + ___	___ X ___
10	24	15	36
___ + ___	___ X ___	___ + ___	___ X ___
18	56	22	121
___ + ___	___ X ___	___ + ___	___ X ___
20	75	23	120
___ + ___	___ X ___	___ + ___	___ X ___
21	104	24	144

UNIT 2 Mental addition and subtraction

Look, think and arrange the numbers.
Make every circle add up to 11.
1, 2, 3, 4, 5, 6, 7, 8, and 9.



To add numbers mentally you can:

- **use patterns.**

8 + 4 = 12

80 + 40 = 120

68 + 4 = 72

- **use rounding.**

28 + 9 = 28 + 10 – 1 = 37

60 + 49 = 60 + 50 – 1 = 109

- **use near doubles.**

25 + 26 = 25 + 25 + 1 = 51

45 + 47 = 45 + 45 + 2 = 92

There is another option; you can break the numbers up.

88 + 42 = 88 + 2 = 90 + 40 = 130

Look, answer and tick the box if you got it correct. You have 2 minutes.

8 + 4 = ☐	56 + 28 = ☐	6 + 5 = ☐	96 + 23 = ☐
12 + 7 = ☐	34 + 70 = ☐	47 + 35 = ☐	21 + 14 = ☐
9 + 2 = ☐	25 + 23 = ☐	92 + 11 = ☐	8 + 15 = ☐

I answered _____ out of 12.

Read and answer using mental calculation only.

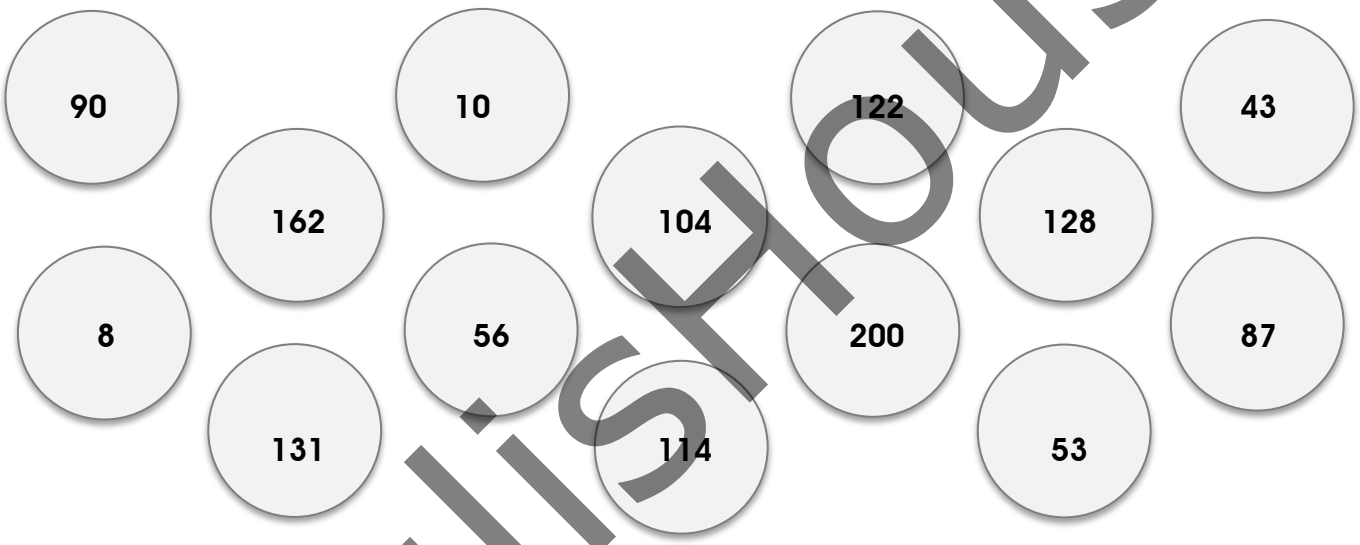
a) What number is fourteen more than thirty-three? .....

b) What is the total height of two buildings 12 meters tall? .....

c) Add together fifty-seven and twenty-five. .....

d) In fourth grade are two groups. One group has thirty-two chairs and the other one has twenty-eight chairs. How many students can you sit in total? .....

Colour to match the numbers that make the total 218.



Complete the chart. Do not use any paper or calculator.

+	12		7	14		15
8	20					
				24		
15		33			24	
11						
18					27	

Add the numbers.

65

87

45

+ 76 =

Throw two dice and add up the numbers. Then get the total number.

Round 1 - 5 throws

Turn 1	+	Turn 2	+	Turn 3	+	Turn 4	+	Turn 5

Total number: _____

Round 2 - 5 throws

Turn 1	+	Turn 2	+	Turn 3	+	Turn 4	+	Turn 5

Total number: _____

Round 3 - 5 throws

Turn 1	+	Turn 2	+	Turn 3	+	Turn 4	+	Turn 5

Total number: _____

To subtract numbers in your mind, you can:

- **subtract in two parts.**

53 – 8: 53 – 3 = 50 – 5 = 45

46 – 9: 46 – 6 = 40 – 3 = 37

- **use subtraction patterns.**

14 – 6 = 8

74 – 6 = 68

- **subtract in parts (tens and ones).**

75 – 21: 75 – 20 = 55 – 1 = 54

97 – 33: 97 – 30 = 67 – 3 = 64

- **use rounding.**

74 – 39: 74 – 40 = 34 + 1= 35

64 – 28: 64 – 30 = 34 + 2 = 36

Look, answer and tick the box if you got it correct. You have 2 minutes.

37 – 9 = ☐	76 – 34 = ☐	123 – 43 = ☐	14 – 6 = ☐
23 – 5 = ☐	112 – 89 = ☐	56 – 23 = ☐	88 – 63 = ☐
60 – 24 = ☐	78 – 35 = ☐	52 – 7 = ☐	98 – 34 = ☐

I answered _____ out of 12.

Read, think and answer the questions.

a) What is the difference between 76 and 99? .....

b) How much less is 36 than 67? .....

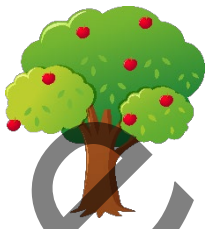
c) What is 95 take away 77? .....

d) How much less is 46 than 87? .....

You're up!

Read and answer the questions.

a) A big apple tree has sixty apples. Thirty-nine of those apples are not ripe yet.

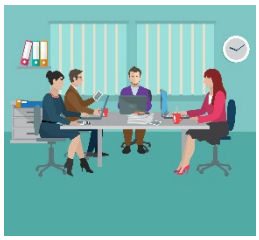


How many ripe apples does the tree have?

b) Jeremy's assignment this weekend is to read a book with 69 pages. On Saturday he read 26 pages.

How many pages does he need to read on Sunday?

c) There were seventy employees working in an office. 34 of them went to the cafeteria to have lunch.

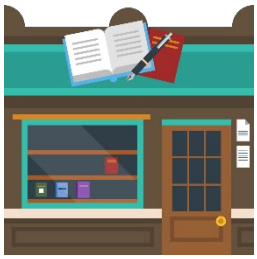


How many employees are left in the office?

d) Professor Carter gave his seventy-one students a choice between writing a paper and taking an exam. Twenty-nine of them wrote a paper.

How many students took the exam?

e) A school library bought 83 new books in the last two years. Thirty-six of those books were bought this year.



How many new books did the library buy last year?

Addition and subtraction with 6 digits

Read and answer the question.
Mr Miller has a shop at the city centre. In his shop, there are 15 718 DVDs. 6 199 are audio DVDs and the rest of them are video DVDs.

Find the number of video DVDs in Mr Miller's shop.
T_____ a_____ _____ v_____ DVDs i____ Mr M_____ s_____.

To work out 6-digit additions, keep on adding until you have no more numbers to add. Remember, when you get a number bigger than ten, add the tens number in the next line.
Look at the examples.

What is 547 381 + 212 345?

```
    1
  547381
+ 212345
--------
  759726
```

What is 381576 + 290734?

```
  1 111
  381576
+ 290734
--------
  672310
```

Solve these.

a) 381576 + 290734 = _____

b) 745079 + 854661 = _____

c) 420670 + 985410 = _____

Read and answer the questions.

During a military parade, 176 790 U.S. flags were used and 117 210 U.S. flags were unused.
How many U.S. military flags were available during the parade in total?

A man has bought land in two different states. In California he paid $239 610 for his new land and $ 592 730 for his new land in Texas.
What is the total value of the land the man has just bought?

A leading mobile phone company manufactures 486 570 smart phones and 540 920 tablets in a year.
How many smart phones and tablets are manufactured altogether in a year?

During 2014 – 2015 school year, primary schools awarded 802 654 diplomas and secondary schools 179 833 diplomas.
How many diplomas were awarded in total?

To work out 6-digit subtractions, keep on subtracting until you have no more numbers to subtract. Remember, when the number below is bigger than the one above, think of the one above as the next tens number and add the tens to the number below in the next line.

Look at the examples.

What is 586323 - 17367?

$$\begin{array}{r} 5\ 8\ 6\ 3\ 2\ 3 \\ -\quad 1_{+1}\ 7_{+1}\ 3_{+1}\ 6_{+1}\ 7 \\ \hline 5\ 6\ 8\ 9\ 5\ 6 \end{array}$$

What is 945619 – 697585?

$$\begin{array}{r} 9\ 4\ 5\ 6\ 1\ 9 \\ -\quad 6_{+1}\ 9_{+1}\ 7\ 5_{+1}\ 8\ 5 \\ \hline 2\ 4\ 8\ 0\ 3\ 4 \end{array}$$

Solve these.

a) 915418 − 14267 = ----------

b) 751926 − 587857 = ----------

c) 416358 − 12564 = ----------

Look and complete the boards.

-	56	79	43	80	92
25					
16					
38					
41					
12					

-	18	16	19	17	15
11					
13					
10					
15					
12					

You are up!

Read and answer the questions.

a) What is the largest number you can make with these digits? 0, 1, 2, 3, 5, 6, 7 and 9. _____

b) Subtract 150 from this number. _____

c) What is the smallest number you can make with the digits? 9, 7, 6, 5, 3, 2 and 1. _____

d) Add 250 to that number. _____

e) What is the closest number to 50 million you can make using the digits? 0, 1, 2, 3, 5, 6, 7 and 9. _____

f) Write at the number 36 105 395…

Round it to the nearest 10. _____

Round it to the nearest 100. _____

Round it to the nearest 1000. _____

Round it to the nearest 10 000. _____

Round it to the nearest 100 000. _____

Round it to the nearest 1 000 000. _____

Adding and subtracting money

Read and answer the questions.

Some friends are at a stuffed - animals store. These are the stuffed - animals they can buy and the price for each.

64 ¢

83 ¢

21 ¢

92 ¢

a) Angela has 96 cents. If she buys a stuffed-cat, how much change will she get back? .....

b) Pedro has 78 cents to buy a stuffed-duck. How much change will he get back? .....

c) Daniela wants to buy a stuffed-monkey. She has 42 cents. How much change will she get back? .....

d) Ramiro has $1.45. He wants to buy a stuffed-dog and a stuffed-monkey. How much will he have left? .....

You can change dollars into cents and cents into dollars. Look at the coins and the bill below.

What is the word for each?

One dollar

Quarter

25 ¢

Dime

10 ¢

Nickel

5 ¢

Penny

1 ¢

Convert these into cents.

a) $ 1.25 .....

b) $ 3.48 .....

c) $ 8.62 .....

d) $ 2.35 .....

e) $ 5.45 .....

f) $ 12.34 .....

Convert these into dollars.

a) 175 ¢ .....

b) 432 ¢ .....

c) 515 ¢ .....

d) 123 ¢ .....

e) 345 ¢ .....

f) 605 ¢ .....

Add the money in each set.

_____

_____

_____

_____

Read and complete.

To give change, you have to subtract!
What is the change from $20 for a sweater costing $13.9?

20 – 13.9 = _____

Look at what the following people have bought and write the change they got.

Truck
$ 3.75

Blocks
$ 5.63

Aeroplane
$ 6.32

Drum
$ 8.96

Ball
$ 1.35

Car
$ 2.40

Doll
$ 7.10

Train
$ 8.96

Boat
$ 7.29

Teddy bear
$ 15.87

a) A truck + a car = _____. What's the change from $10? _____
b) A ball + a train = _____. What's the change from $ 15? _____
c) The blocks + a teddy = _____. What's the change from $ 30? _____
d) A drum + a boat = _____. What's the change from $ 30? _____
e) A doll + teddy = _____. What's the change from $ 30? _____

Look and answer the questions.

a) Daniela had $20. She bought a green handbag.
How much money does she have left?

b) Martha buys a pair of green shoes and a green wallet. She has a coupon worth $12.75. How much money does she need to pay?

c) Andrea bought a pair of red shoes and a grey hat. How much money did she pay?

d) Susan has enough money to buy the cheapest handbag. How much more money does she need to buy the most expensive one?

e) If Sharon bought all the matching accessories for her orange dress, how much money would she pay?

You're up!

Read the menu and answer the questions.

MENU


$ 5.23


$ 12.60


$ 9.11


$ 5.15


$ 7.50


$ 8.15


$ 2.36


$ 10.00

a) Maria ate a salad and a sandwich. How much did she pay? _____

b) Maria had $ 20, how much does she have now? _____

c) Fran and Sally bought two sodas and a pizza. What was their total? _____

d) You have $ 20 to spend. What would you eat at the restaurant? _____

e) Would you get any money left? _____

f) Bernard spent $ 24.07. What did he eat? _____

g) If you buy 5 cupcakes, how much will you pay? _____

Length, weight and time conversion

Read and answer the questions.

Dan is 145 centimetres tall, Kevin is 1.23 metres tall and Fred is 15 decimetres tall.

Who is the tallest? _____

What did you do to find the answer?

.....

.....

How can you measure someone using objects from the classroom but not your ruler?

.....

.....

In this conversion chart, the base unit is "the meter," meaning that the numbers are the equivalencies according to "one meter."

The Metric Conversion Chart

Kilometre	Hectometre	Decametre	METRE	Decimetre	Centimetre	Millimetre
1000	100	10	1	0.1	0.01	0.001

By using this table we can say that:

- **60 decimetres = 6 metres**
- **123 centimetres = 1.23 metres**
- **1 kilometres = 1000 metres**
- **10 metres = 1 decametres**

Convert the following measures using the chart.

a) 10 kilometres = _____metres.

b) 5 hectometres = _____ metres.

c) 120 decimetres = _____ centimetres.

d) 11 200 millimetres = _____metres.

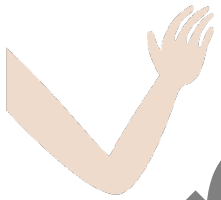
e) 300 metres = _____ kilometres.

f) 2.44 kilometres = _____ metres.

In pairs, measure the following body parts and report the answers in centimetres and millimetres.

.....

.....



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.....

Yourself

Draw yourself and write the answer.

Word problems - Length

Read and answer the questions.

a) Blanca's mother is making bottles to decorate her kitchen and she has 63 centimetres of ribbon. She needs 16 centimetres of ribbon for each bottle.
How many bottles can she decorate?

b) A students painted 90 centimetres of a wall, then another student painted 3450 millimetres and the teacher painted the last 2 metres of the wall.
What was the total width of the wall?

c) When Ben was 10 years old, he was 1.35 metres tall. His son is ten now and he is 14 decimetres tall.
Who is taller?

Weight

Read and answer the question.

Everything on Earth has a weight because everything is affected by gravity. So weight is how gravity pulls everything to the centre of the Earth.

Tom has a box of books that weighs 1.2 kilograms. Sara has a box that weighs 625 grams.

How much more weighs Tom's box than Sara's?

The following chart will help you to make conversions.

Each metric unit gets 10 times bigger. ←

Kilogram	Hectogram	Decagram	Gram	Decigram	Centigram	Milligram
1000	100	10	1	1 / 10	1 / 100	1 / 1000

→ Each metric unit gets 10 times smaller.

Convert the given measures using the chart above. Follow the guides.

a) 6000 milligrams = _____ grams.

6000 divided by 1000 = _____.

6 multiplied by 1 = _____.

b) 3 Decagrams = _____ decigrams.

3 multiplied by 10 = _____.

30 multiplied by 10 = _____.

c) 1670 grams = _____ Hectograms.

_____ divided by 100 = _____.

d) 500 Hectograms = _____ Kilograms.

_____ multiplied by _____ = _____.

_____ divided by _____ = _____.

e) 170 centigrams = _____ grams.

_____

_____

Word problems - Weight

Read and answer the questions.

a) Sam has to balance the weight between some apples and a watermelon. Each apple weighs 35 grams and the watermelon weighs 3.5 kilograms. How many apples does he need to make the apples as heavy as the watermelon?

b) Anna buys 3 kilograms of seeds. She sells cans with 125 grams of seeds for $ 25.

1. How many cans can she fill?
2. How much can she earn if she sells all of them?

c) Each candy has 1345 milligrams of sugar. How many candies do you need to collect 2.5 kilograms of sugar?

Word problems - Time

Read and answer the questions.

We know that…

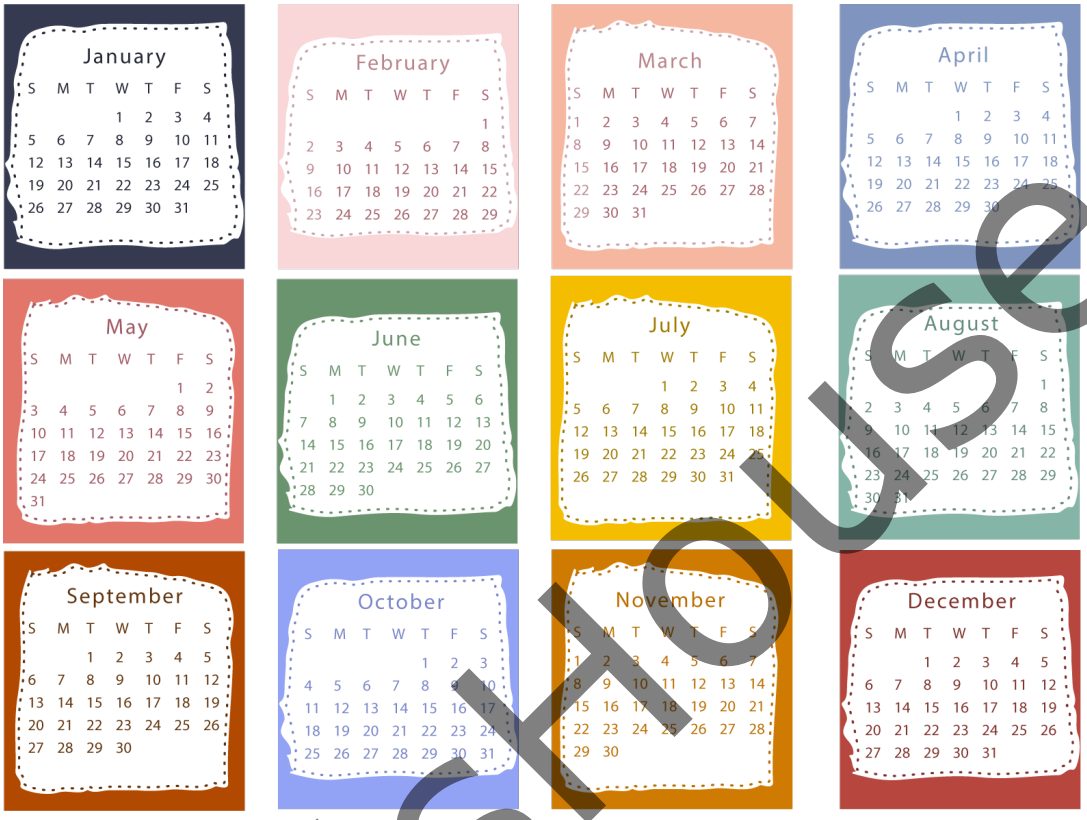
1 minute = 60 seconds	1 day = 24 hours	1 month = 4 weeks
1 hour = 60 minutes	1 week = 7 days	1 year = 12 months

a) George's family is making a trip by car. They travel 95 kilometres per hour. How many kilometres can they go in two days?

b) A machine can fill 20 bottles of water every 30 minutes. How much time does the machine need to fill 100 bottles?

c) Every 15 minutes, an airplane arrives to the city. If the first plane arrives at 6 am, what time does the 15th plane will land?

Look at the calendar and answer the following questions.



a) Sara is going to Canada for three weeks. If she goes on May 15th, when is she coming back? .....

b) Mike's birthday is on November 14th. Today is May 2nd. How long is it before his birthday? .....

c) Gina received on September 12th the backpack she ordered on-line. If the delivery takes a week, when did she buy the backpack? .....

d) Frank finished his course on February 24th. He has a two-week break before his next course. When does the course start? .....

e) The students have exams every 30 class days. In February, the exams were on the 19th. When are the next exams? .....

You're up!

Look and write the title for each section. Then complete the tables.

..... conversion

cm	76	22.96	63.88	**mm**	850	228.9	553
mm	.....	.....	.....	**cm**	.....	.....	.....
m	21.3	58	4.14	**cm**	1026	912	1890
cm	.....	.....	.....	**m**	.....	.....	.....

..... conversion

a) 3 500 g + 2 900 g = ... **kg**

b) 2 600 g + 1280 g = ... **kg**

c) 7 kg + 4325 g = ... **kg**

d) 8 700 g + 200 g = ... **kg**

e) 1350 g + 1 100 g = ... **kg**

f) 5 000 g + 4 kg = ... **kg**

..... conversion

a) 2 450 secs = ... **hours**

b) 13 mins 42 secs = ... **secs**

c) 10 080 mins = ... **days**

d) 1 day l hour = ... **mins**

e) 34 days 576 hours = ... **days**

f) 1 min 19 secs = ... **secs**

UNIT 3 Multiplication word problems

Solve the operations on a separate sheet of paper. Write the results of four multiplications downwards. This order must show you the answers to the other four "across."

a) 43 x 91

b) 46 x 84

c) 94 x 91

d) 50 x 92

e) 44 x 35

f) 98 x 97

g) 46 x 75

h 195 x 31

Read and complete.

mean	that	many	it	these

There are ..... special words you can find in multiplication word problems; ..... words also ..... multiplication, product, by, times and lots of.

When you have to answer a word problem, it is very important ..... you understand all the information in ..... and what kind of answer to look for.

Read and answer the questions.

a) Greg's toy box has 35 toys.

How many toys are there in 5 similar boxes?

Every child in his class has the same amount of toys in their toy boxes, how many toys will there be if there are 25 students?

b) A man can climb 3.6 kilometres per day. If he can climb the mountain in 7 weeks, how tall is the mountain?

c) A pizza restaurant sells 137 pizzas every day. Each pizza costs $ 148.

How much does the restaurant earn each week?

You're up!

Throw the dice, write the numbers and multiply. Then double and triple them.

						Double	Triple
a)	.....	x	.....	=	.....	.....	.....
b)	.....	x	.....	=	.....	.....	.....
c)	.....	x	.....	=	.....	.....	.....
d)	.....	x	.....	=	.....	.....	.....
e)	.....	x	.....	=	.....	.....	.....
f)	.....	x	.....	=	.....	.....	.....
g)	.....	x	.....	=	.....	.....	.....
h)	.....	x	.....	=	.....	.....	.....

Two – digit and long divisions

Read and guess the numbers.

a) _____ c) _____

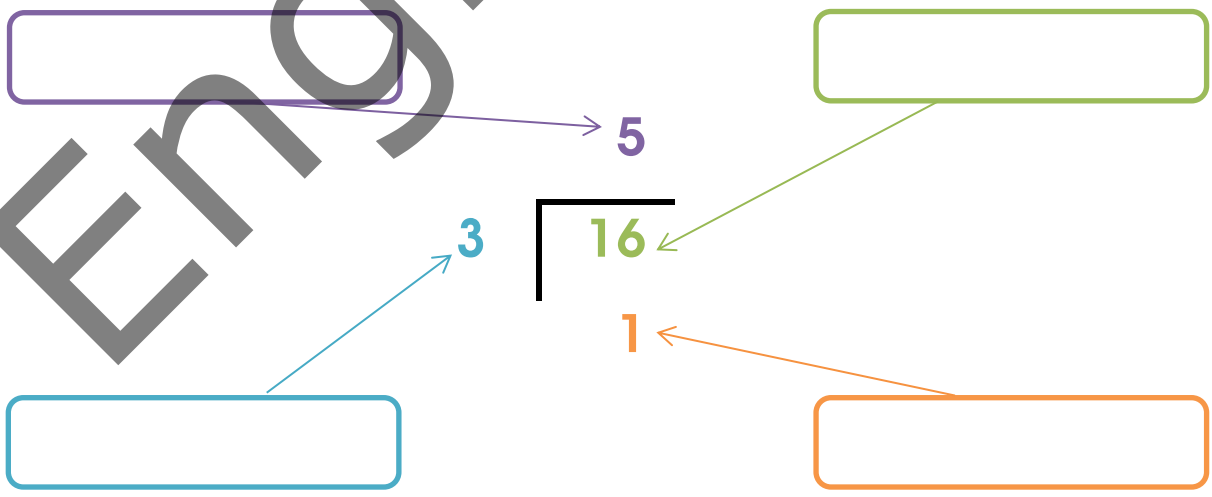
b) _____ d) _____

What number am I?

a) Divide me by 6 and add 3. Divide this by 3, then multiply by 4 to get 12.
b) Multiply me by 3, then add 3. Divide by 5, then subtract 4. The final answer is 2.
c) Divide 24 by me, then multiply by 5. Subtract 7 and multiply by 7. You get 56.
d) Divide me by 5, subtract 9, then multiply by 6. Subtract 2, then multiply by 4 to get 16.

Look and label the parts of the division.

divisor remainder quotient dividend



Read and complete.

This is how we proceed with long divisions:

15 cannot go into 3. So we go to the next digit. 15 goes into 36 two times. If we subtract 36 minus 30, it equals 6.

Next carry down the 4 to make 64. Now 15 goes into 64 four times. Take 60 from the 64 to get your remainder, which is 4.

```
      2
15 | 3 6 4
   - 3 0
     6
```

```
      2 4
15 | 3 6 4
   - 3 0
     6 4
   - 6 0
       4
```

Answer the next divisions and circle in red the remainder "when it is not zero."

a) 15 | 782

b) 32 | 976

c) 29 | 781

d) 55 | 245

e) 36 | 647

f) 91 | 744

Word problems

Read and answer the questions. Do the operations on a separate paper.

a) In the airport, the baggage has to be put in order. Each bag takes 62 centimetres. If the cellar measures 895 centimetres, how many bags go into it?
Explain what you did to discover the answer.

.....

.....

.....

b) Tom has 530 cookies and he has to make 45 cookie jars. How many cookies does he need to put in each jar?
Explain what you did to discover the answer.

.....

.....

.....

c) Mary has to feed her fish. Each fish eats 20 grams. If she has a bag of half a kilo, and she uses it all, how many fish does she have?
Explain what you did to discover the answer.

.....

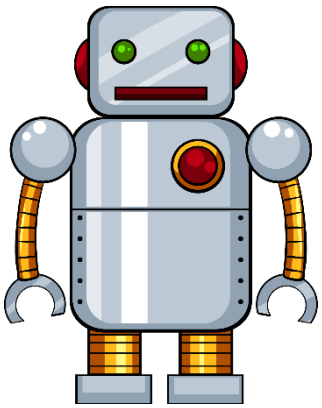
.....

.....

You're up!

Make a path through the maze by colouring all the side-by-side equivalent pairs.

3 X 4	11 X 13	18 ÷ 6	8 X 7	210 ÷ 3
36 ÷ 3	7 X 5	100 ÷ 5	32 ÷ 4	4 X 2
15 ÷ 3	25 ÷ 5	5 X 4	4 ÷ 4	6 X4
10 X 5	120 ÷ 2	3 X 9	7 X 3	3 X 8
2 X 8	8 X 5	120 ÷ 3	2 X 5	40 ÷ 4
9 X 5	4 X 12	81 ÷ 9	9 X 6	77 ÷ 7
28 ÷ 7	6 X 8	5 X 5	42 ÷ 7	9 X 2
32 ÷ 8	9 X 7	11 X 4		
9 X 4	6 X 6	90 ÷ 3		
12 X 8	9 X 8	6 X 12		

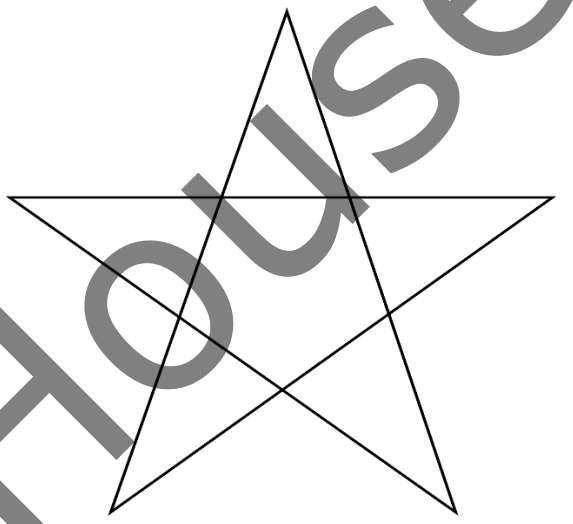


Triangles

Read and answer the question. Then draw.

Look at the figure below. How many triangles can you see? _____

Draw three lines over it so you can get 11 triangles and number them.



Read and underline the characteristics of the sides a triangle has. Then look at the triangles and label them.

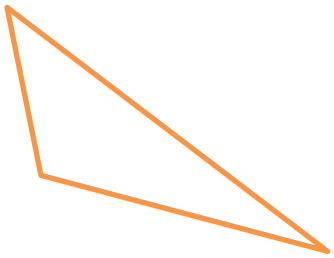
Triangles are polygons that have some properties you should remember:

- The sum of the angles is always 180°.
- Triangles can be categorized by the measure of their angles and by their sides
- .
-

Classifying triangles by their sides

Equilateral triangle

It has 3 sides that are the same length.



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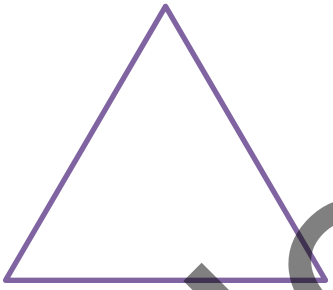
Isosceles triangle

It has at least 2 sides that are the same length.



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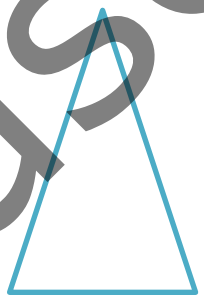
Scalene triangle

It has no sides that are the same length.



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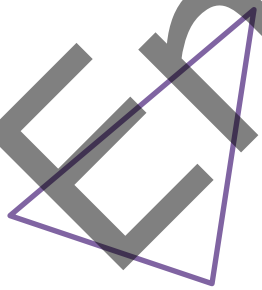
Classifying triangles by their angles

Right triangle

It has 1 angle that is a right angle (90°).



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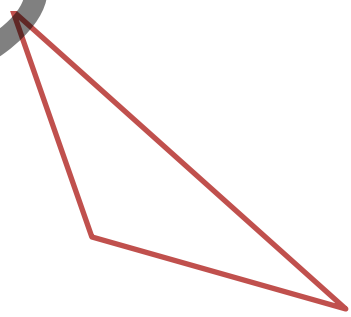
Acute triangle

It has all 3 angles that are acute angles (less than 90°).



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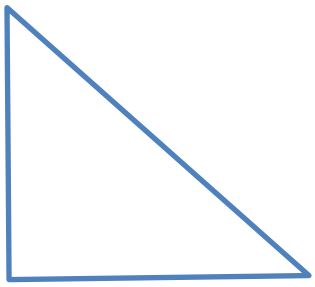
Obtuse triangle

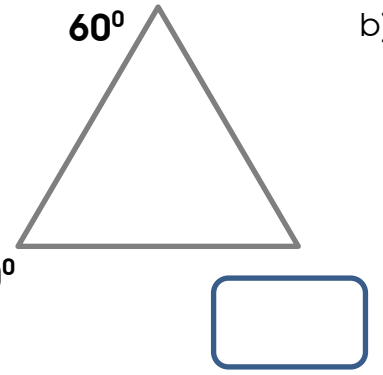
It has 1 angle that is an obtuse angle (greater than 90°).



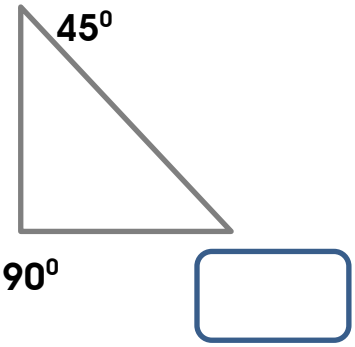
.....

Write the measure of the missing angles in each triangle.

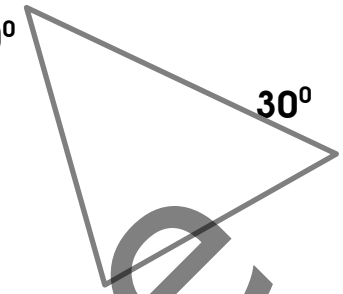
a) 60^0 60^0



b) 45^0 90^0

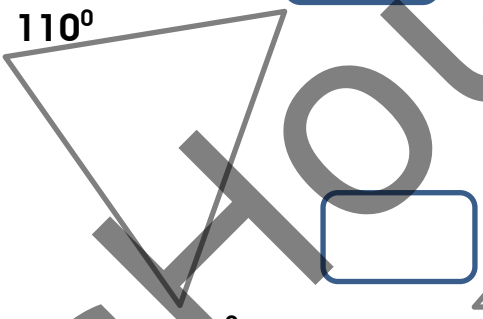


c) 50^0 30^0

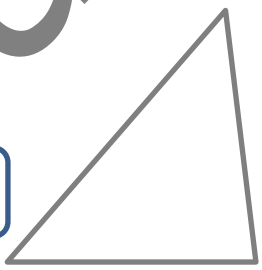


d) 40^0 85^0

e) 110^0 20^0



f) 55^0 75^0



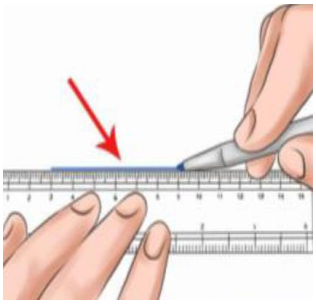
Classify the triangles above by their angles and sides.

	Angles	Sides
a)	.....	.....
b)	.....	.....
c)	.....	.....
d)	.....	.....
e)	.....	.....
f)	.....	.....

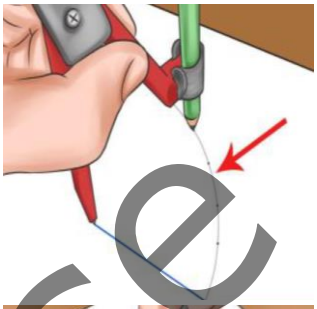
Drawing triangles

Read and draw triangles using the measures below as the base line.

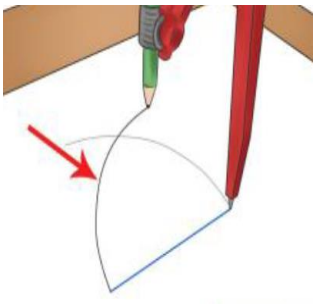
Step 1.
First draw a straight line as the base of the triangle.



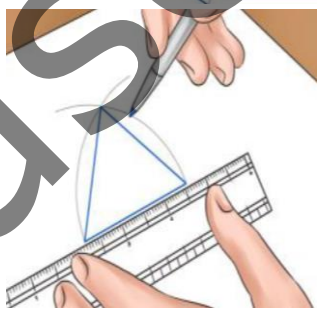
Step 2.
Put the point of your compass at one end of the segment and trace a quarter of circle.



Step 3.
Repeat the trace switching the side of the compass – where both sides cross.



Step 4.
Complete the triangle.

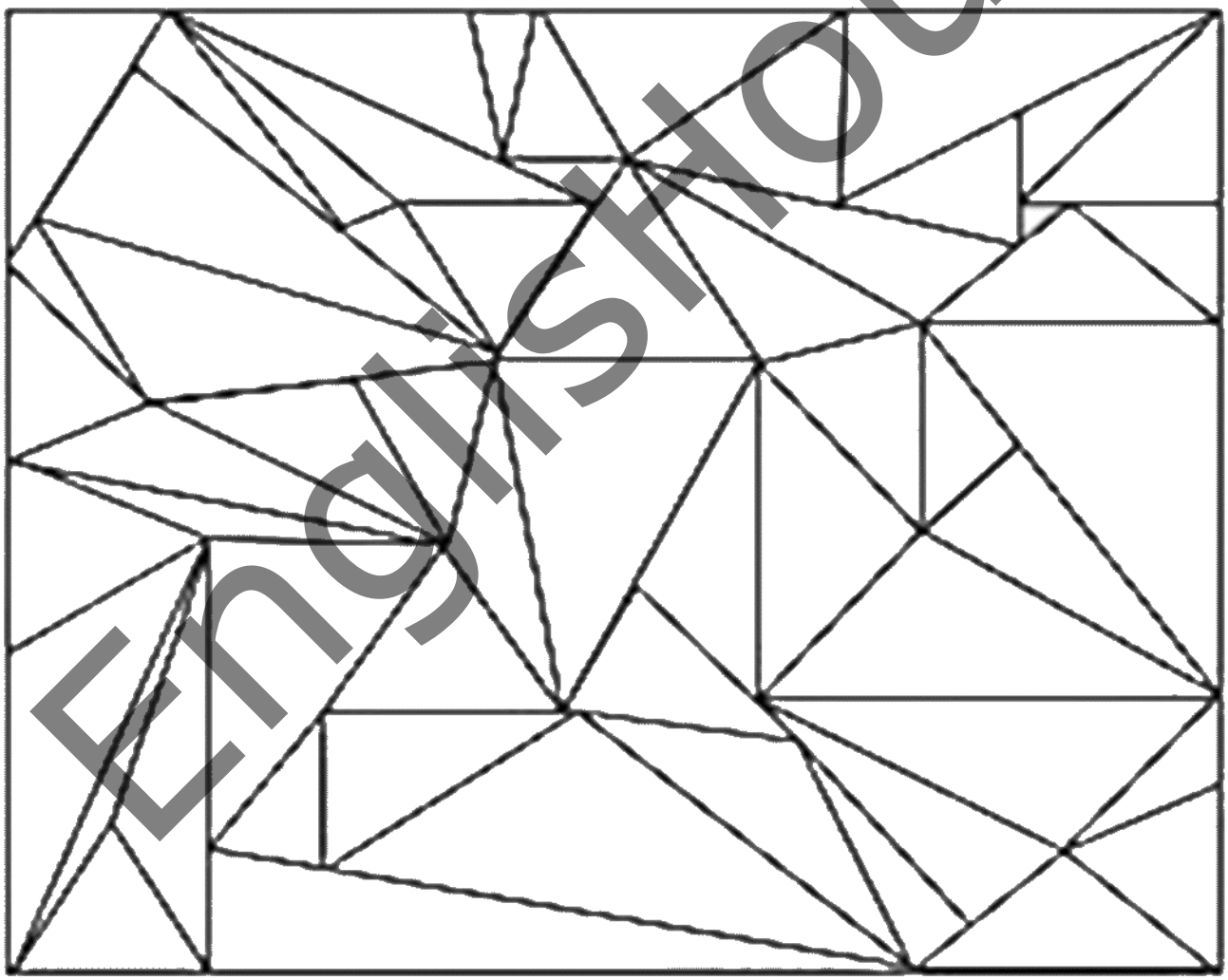


a) 3 cm **b) 5 cm** **c) 8 cm**

You're up!

Read, write and colour.

Isosceles triangle	Scalene triangles	Equilateral triangles
Characteristics:	Characteristics:	Characteristics:
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
Colour them blue.	Colour them green.	Colour them yellow.

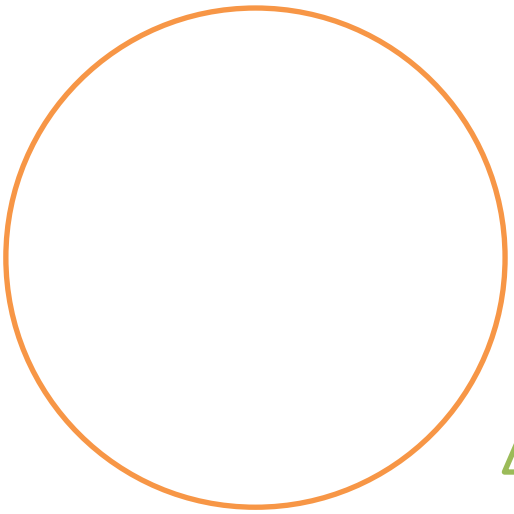


UNIT 4 Symmetry

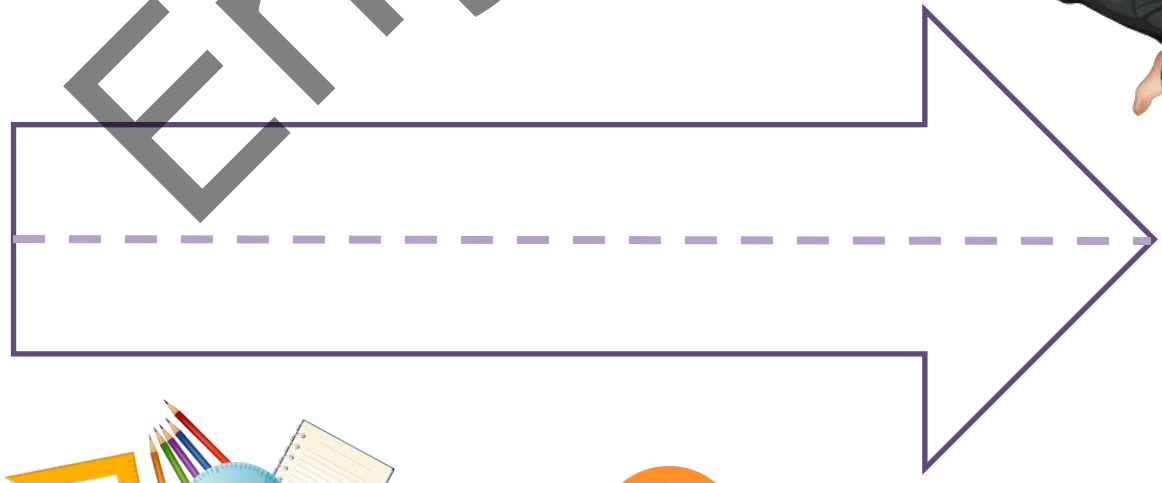
Read and draw lines.

Trace as many lines of symmetry as you can in the following shapes.

How many lines did you draw?

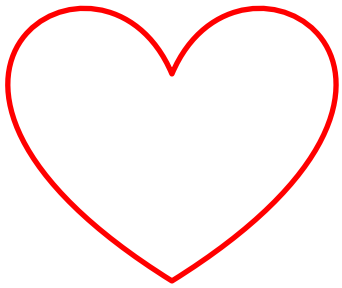


Symmetry is when one shape becomes exactly like another if you flip, slide or turn it. The simplest type of it is **reflection**.



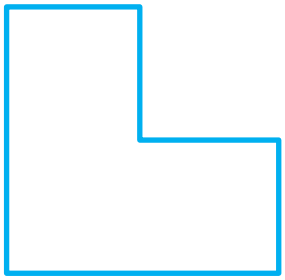
Draw lines of symmetry and write the number of lines each shape has.

a)



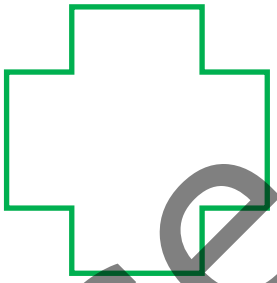
It has _____ line(s).

b)



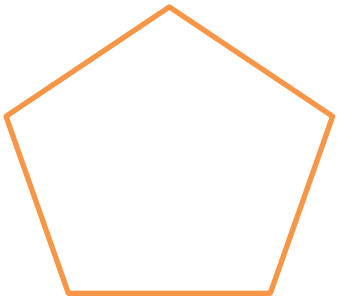
It has _____ line(s).

c)



It has _____ line(s).

d)



It has _____ line(s).

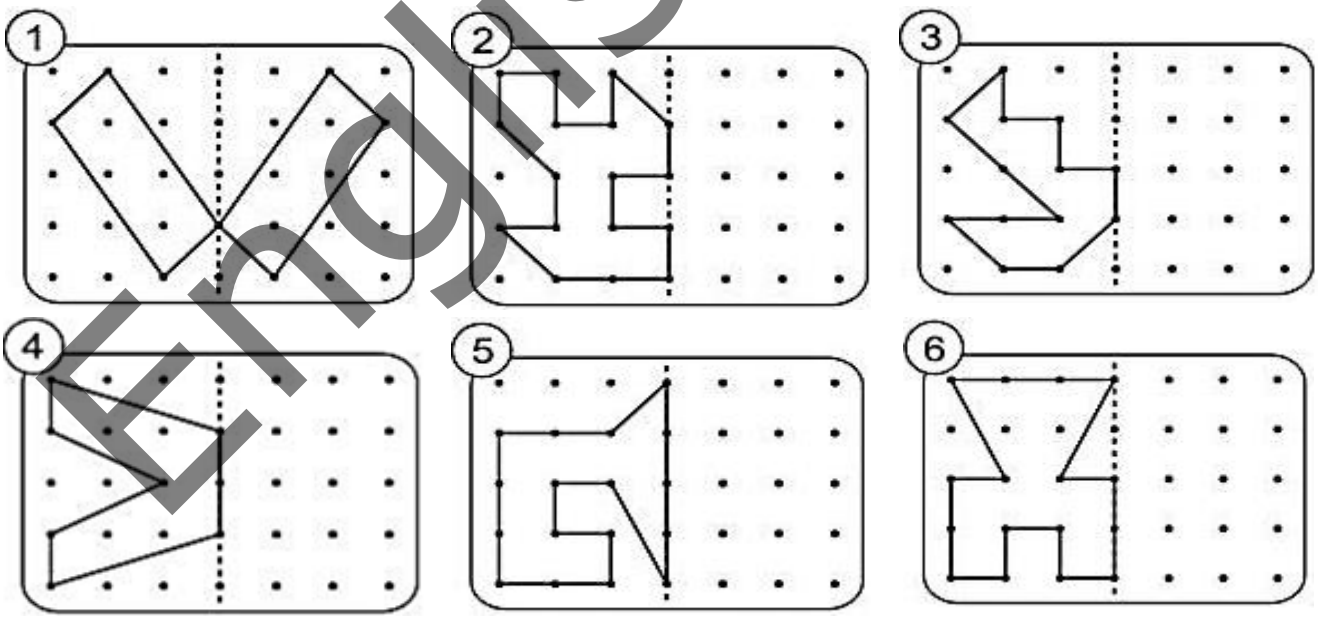
e)

It has _____ line(s).

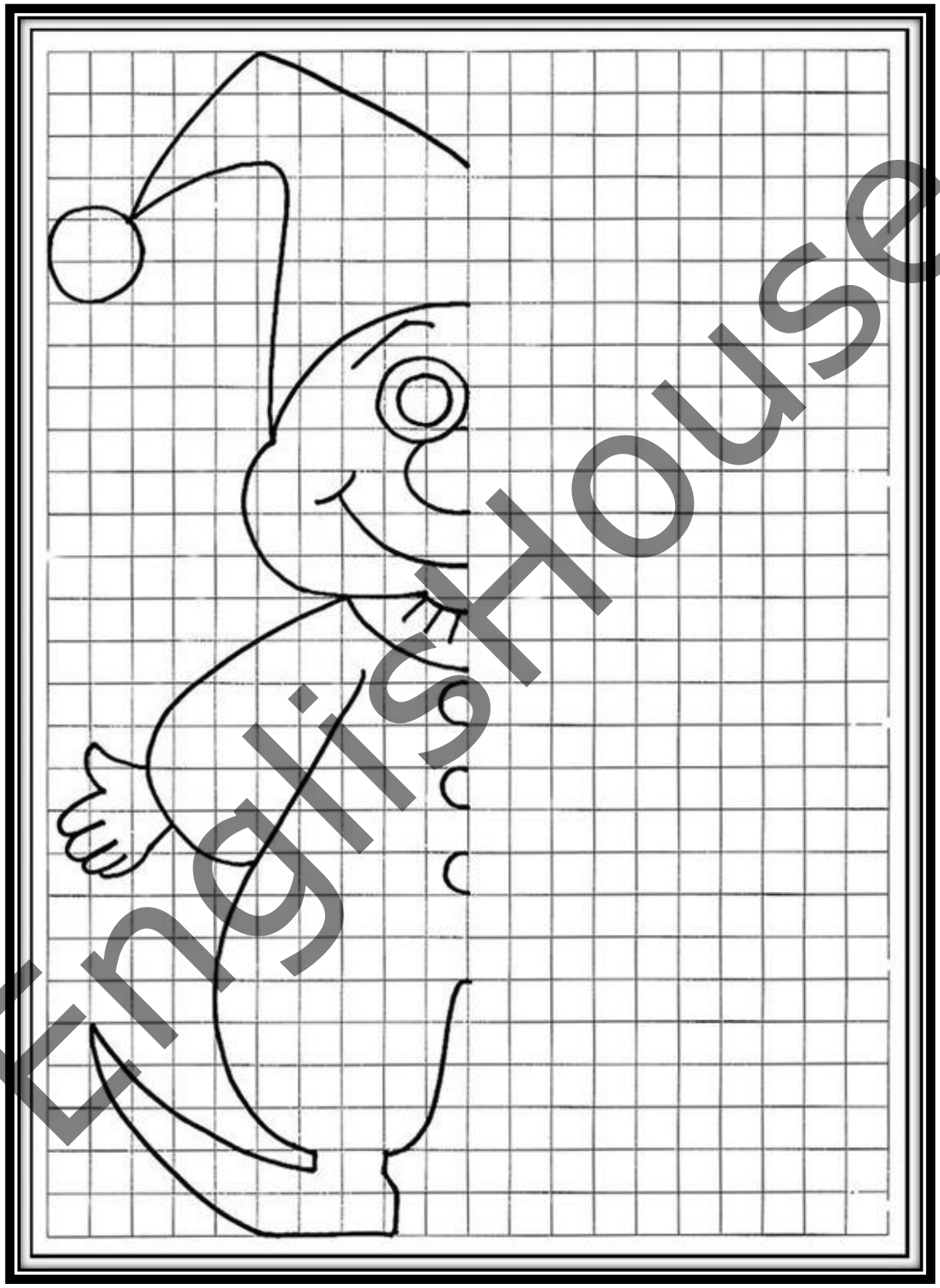
f)

It has _____ line(s).

Look and draw the reflections.



Draw the missing part of this drawing.



You're up!

Make the following quadrilaterals in paper and fold them up to find their lines of symmetry. Then glue them in the spaces below and write your findings on the shapes being symmetrical or not.

Glue here

Glue here

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Glue here

Glue here

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Glue here

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Decimals

Read and colour the boxes to match the numbers. Then explain what you did to find the paring.

7 / 100	**7 / 1000**	**9/100**	**7/10**
0.007	**0.7**	**0.07**	**0.09**

Read and write the number in words.

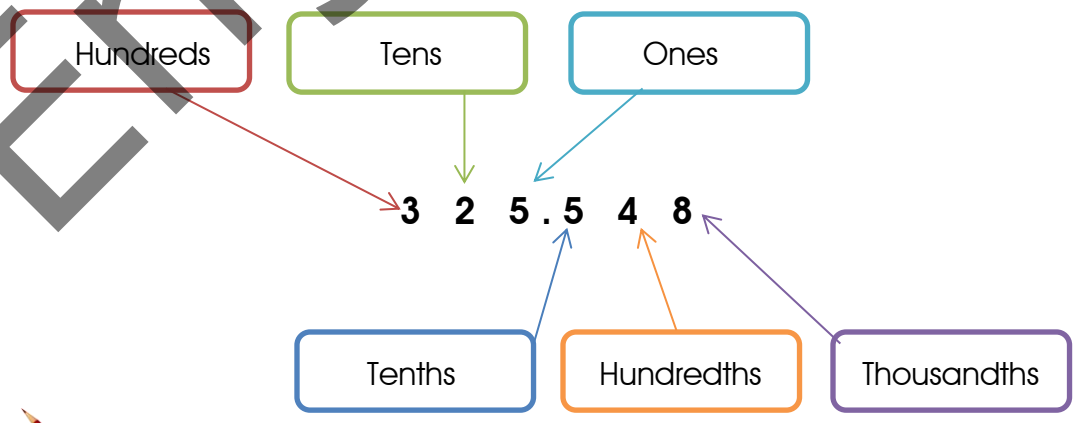
Decimal: It is a number that has a decimal point followed by digits that show a value which is smaller than one.

To read and write decimals, you have to read the whole number first. Then use "and" for the decimal point and read the digits to the right of the decimal point as a whole number. Finally, say the place name of the last number.

Example:

25.578 = Twenty-five **and** five hundred seventy-eight **thousandths**

325.548= _____.



Write the place name of the coloured number.

a) 34.7**6**1 = ...

b) 7.54**3** = ...

c) 113.**9** = ...

d) 78.33**5** = ...

e) 9.2**8** = ...

Write the numbers as words.

a) 67.72 = ...

b) 92.482 = ...

c) 12.3 = ...

d) 88.256 = ...

e) 164.591 = ...

Order the numbers from the smallest to the greatest.

2.85	**1.09**	**81.98**	**10**
1.5	**4.1**	**130.2**	**6.8**
8.07	**15.25**	**3.09**	**1.99**

Adding and Subtracting decimals

Read and answer the questions.

a) What is the total of 45.97 plus 12.61?

b) What is the difference between78.53 minus 34.59?

Explain what you did to find the answer.

.....

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Read and complete.

To add and subtract decimals, you have to line up the terms so that all the decimal points are in a vertical line.

	1	6	.	3	8		8	3	.	1	4
+		3	.	6	2	-		5	.	3	3

Line up the numbers to answer these additions and subtractions.

a) 34.71 + 46.11	b) 56.33 – 12.42	c) 97.26 + 75.63

d) 89.15 – 22.64	e) 17.49 + 9.05	f) 38.27 – 6.54

Word problems

Read and answer the questions.

a) Susan had 10.4 cm of rope and she gave 4.3 cm to Dan.

How much rope does she have left?

b) Frank runs 2.7 kilometres and Ben runs 3.1.

How many kilometres do they run together?

c) Jen had 1.5 kilograms of sugar and she made some lemonade. She used 400 grams. How much sugar does she have left?

d) Ken had 10 litres of water and he filled a bucket with 3.8 litres.

How many litres does the other bucket have?

You're up!

Read and draw lines to match the questions with the correct answers.

Rocy drew a line of 563.4 cm in 2 minutes. Andrea drew a line of 78.934 cm in 1 minute. How long are the lines together?

Azul bought 6 Cds for $58.25 and Bertha bought 25 Cds for 273.67. How much money did they spend?

Carla drove 893.4 miles in 2 days. Carlos drove 456.378 miles in 4 days. How far did they travel together?

Ken made a goal from 78.34 yards during a game, while Joshua made a goal from 134.298 yards. How much farther did Joshua kick the ball than Ken?

Jessie had 780 pounds of chocolate. She gave 456.908 pounds to Jeremy. How much chocolate does Jessie have now?

Nancy ran 673.4 yards and Maria ran 453.912 yards. How much farther did Nancy run than Maria?

55.958

323.092

331.92

642.334

219.488

1 349.778

Divisions with decimals

Read and answer the questions.

Laura needs to make 8 cookie jars. She has 12.76 kg of cookies.

How much will each jar have?

Explain what you did to find the answer.

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To divide with decimals, you can ignore the decimal point at the beginning. Then put it in the same spot as the dividend (the number being divided).

When both numbers are decimals, you have to move the decimal point from the divisor to the right to make it a whole number and move the point in the dividend the same number of places you moved the decimal point in the divisor.

```
      6.25
  53|331.25
   -318
     132
    -106
      265
     -265
        0
```

```
      23.4
  476|1111.384
    -952
     1618
    -1428
      1904
     -1904
        0
```

Answer the following divisions.

a) $6\overline{)8.24}$

b) $7\overline{)14.5}$

c) $2\overline{)42.2}$

d) $4\overline{)9.36}$

e) $1.2\overline{)10.5}$

f) $3.6\overline{)78.9}$

Colour to match the divisions with the answers.

2.8 ÷ 2 =	11.30	5.9	1.4	12.16 ÷ 3 =
		3.01		
21.12 ÷ 7 =				23.6 ÷ 4 =
	8.07		4.05	
		72.7 ÷ 9 =		
55.82 ÷ 7 =				90.41 ÷ 8 =
		7.97		

You're up!

Read and answer the questions.

a) Andrew weighs 42.5 kilograms and his younger brother weighs half his weight. How much does his younger brother weigh?

b) A set of toys costs $ 61.75 and it has 4 toys.
How much does each toy cost?

c) Henry ran 9.3 kilometres this week.
How many kilometres did he run each day?

d) Sara has 6.3 litres of water. She will fill 4 bottles.
How much water will each bottle have?
If each litre costs $ 5, how much did she spend?

The number line

Read and answer the question. Then explain the process or steps you followed to find the answer.

Richard has a collection of 114 comic cards. He has decided to share them evenly among his 8 friends at school, but he wants to keep10 cards because they are his favourite. How many cards will each friend get?

.....

.....

.....

Read and complete the definition using the words in the box.

to	also	at	between	on	and

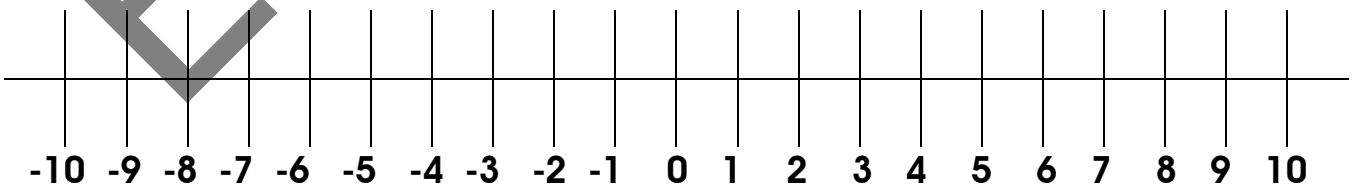
- **What is a number line?**

It is a line ..... which numbers are placed ..... intervals. It is useful ..... illustrate simple numerical operations like addition ..... subtraction. It can ..... be used to show relations ..... numbers.

One important characteristic of a number line is that you can use positive and negative numbers: positive numbers are placed at the right side and the negative ones at the left.

Look and mark whole numbers on the following number line.

9 / - 9

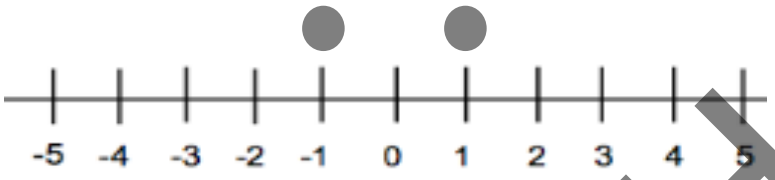


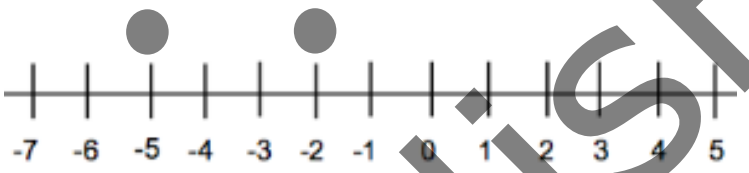
When you write numbers down on a number line, it becomes easier to identify and explain which numbers are bigger or smaller.

Numbers on the left are smaller ***than*** **numbers on the right.**

Look and write math sentences.

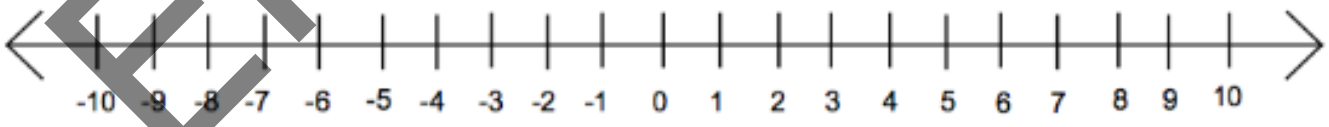
2 is smaller than 5.





Read and mark the information on the number line. Then answer the questions and complete the math sentences.

At recess some kids were talking about the money they had. Maria had $ 5, Mark owed $ 7, Joshua had $ 7 and Rosa owed $ 9.



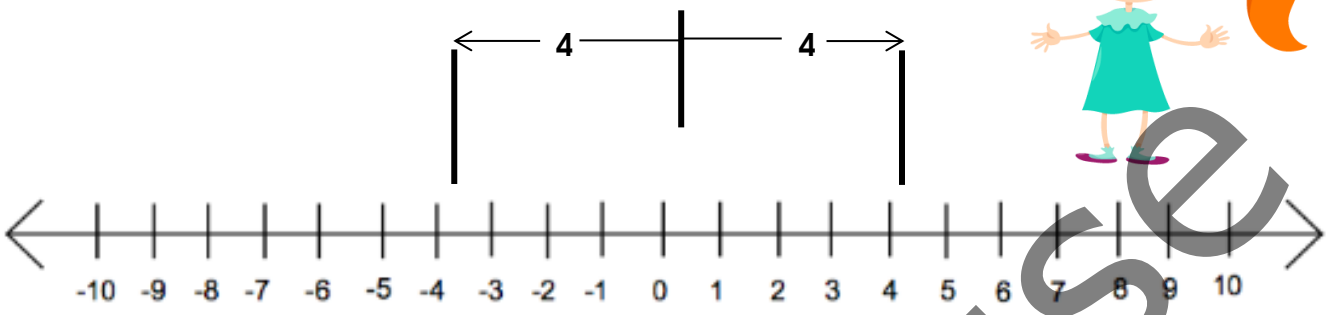
Which kid was the richest? .....

Who is the poorest? .....

Look, read and illustrate. Then write.

- **What does absolute value mean?**

It is the distance between a number and zero.



"4" is 4 away from zero, but "-4" is also 4 away from zero. So the absolute value of 4 is 4, and the absolute value of -4 is also 4.

You can also write it as: → | 4 | = 4 | - 4 | = 4

a) | **7** | **= 7** | **- 7** | **= 7**

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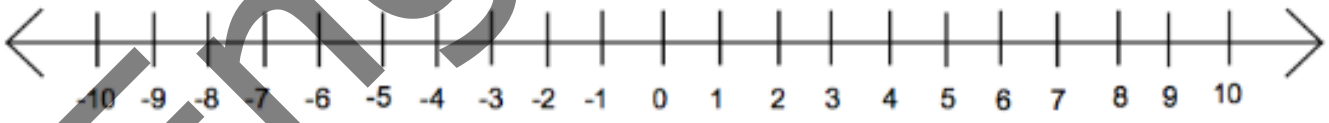
.....

b) | **6** | **= .....** | **- 6** | **= .....**



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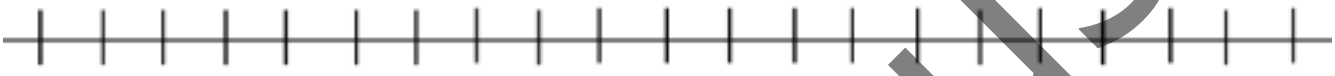
You're up!

Read and put the information on the number line. Then answer the questions.

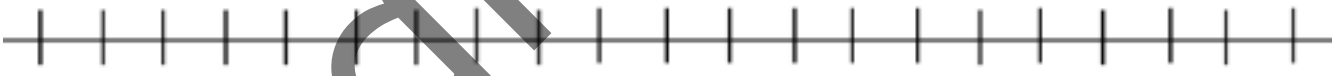
Theresa has to practise her singing because she is going to sing in the school summer festival. This morning, she practised for 30 minutes. After school she practised 40 more minutes. In the evening, she practised for 30 minutes and, before bed, she practised for 20 more minutes.



- How many minutes did she practise today? .....
- How many hours do the minutes make? .....

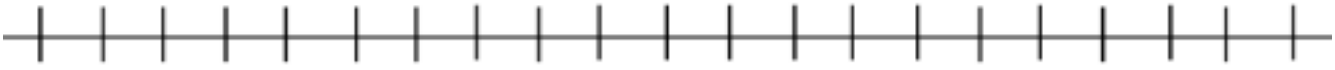
Robert loves Music. He has a huge collection of Rock Cds. Last month, he had 70 Cds. Two weeks ago he got 4 more Cds. Last week he got 5 more Cds and yesterday he got 3 more Cds.

- How many Cds does Robert have now? .....



Mrs Lin is a PE teacher. She likes to play with her students at recess. Today she had 45 tennis balls to play with. When recess time was over, the kids collected the balls and Mrs Lin noticed that 17 balls had disappeared. After a few minutes, Mrs Lin found 3 balls at the playground and 5 balls behind a tree.

- How many tennis balls does Mrs Lin have left? .....



Inverse operations

Look, read and answer.
Tina needs to complete the next activity.
Help her find the missing numbers.

4 5 + ☐ = 5 5 **7 6 - ☐ = 4 6**

1 2 X ☐ = 8 4 **5 0 ÷ ☐ = 6. 2 5**

Explain what you did to find the answer.

.....

.....

Read and find the answer to the operations below.

Addition and subtraction are inverse operations.

Start with 7, and then add 3 and you will get 10. Now subtract 3 and you will get 7 again.

Multiplication and division are inverse operations.

Start with 6, multiply by 2 and you will get 12. Now divide by 2 and you will get 6 again.

a) 1 8 ☐ 2 0 = 3 8

b) 3 4 ☐ 6 = 2 0 4

c) 8 5 ☐ 5 = 1 7

d) 6 3 ☐ 9 = 5 4

Colour the stars to match the answers with the correct operations.

a) 4 5 ÷ 9 = 5

b) ☐ - 3 3 = 1 2

c) 6 0 X ☐ = 180

d) 6 3 + ☐ = 107

e) 1 2 X ☐ = 7 2

f) ☐ - 9 3 = 4 9

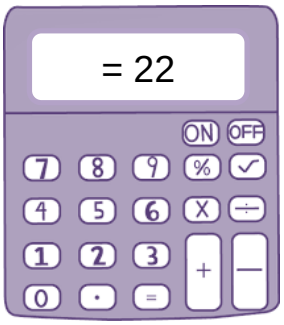
g) 8 3 ÷ ☐ = 4 1. 5

h) ☐ + 2 4 = 1 1 7

i) ☐ X 1 1 = 7 9 2

j) ☐ ÷ 7 = 1 0 2

Write two math operations that equal the numbers given.



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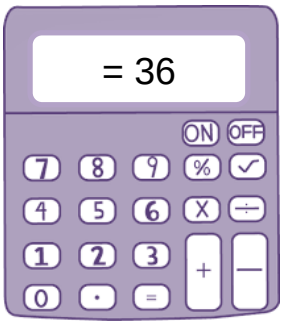

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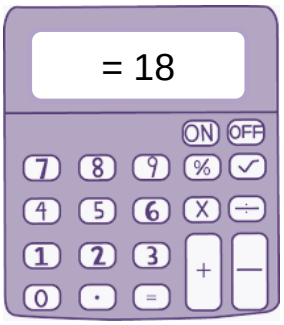

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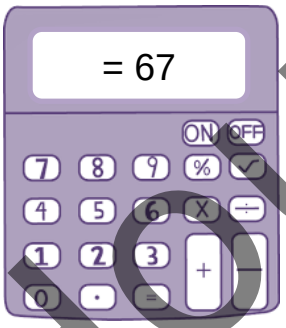

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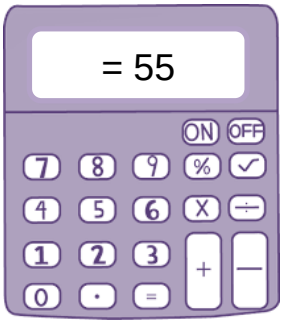

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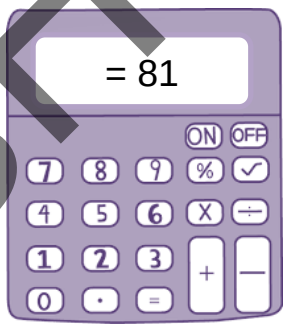

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Read and answer the question.

Sheila and Arthur went to the market to shop for the things they needed for a party. They bought 9 bottles of soda and 7 cartons of juice. They total amount they paid was $ 53. Each bottle of soda costs $ 2. How much does a carton of juice cost?

Explain what you did to find the answer. .....

.....

.....

Use the words to label the operations.

divisor quotient dividend

```
      5
   ____
4 | 2 0
```

20 ÷ 4 = 5

Transform the division above into a multiplication using the same numbers.

Then talk to a friend about how the numbers were moved.

.....

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.....

.....

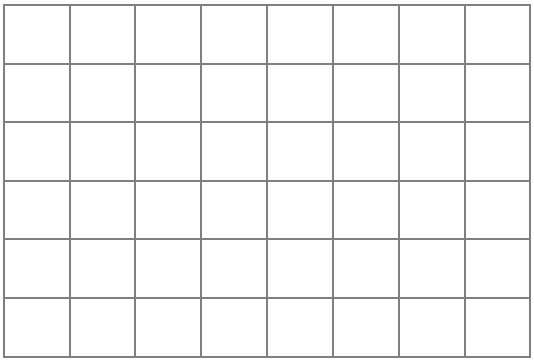
Use the words to label the operations.

Factor Product Factor

Multiplier Multiplicand

6 X 8 = 4 8

Transform the multiplication you just labelled into a division using the same numbers. Then talk to a friend about how the numbers were moved.



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Can you use division elements to solve multiplication problems?

Of course, actually, multiplication and division are closely related – it means they are linked.

The definition of division is "**calculating how many times one number goes into another**."

Solve these operations. Then transform them into multiplications.

a) 24 ÷ 6 = ☐ **b)** 18 ÷ 9 = ☐ **c)** 10 ÷ 5 = ☐

a) ☐ X ☐ = ☐ **b)** ☐ X ☐ = ☐ **c)** ☐ X ☐ = ☐

Look and work out the multiplications. Then transform them into divisions.

	Multiplication					Division				
a)	☐	X	☐	=	27	☐	÷	☐	=	☐
b)	40	X	☐	=	0	☐	÷	☐	=	☐
c)	5	X	☐	=	40	☐	÷	☐	=	☐
d)	☐	X	8	=	32	☐	÷	☐	=	☐

Word problems

Read and write the information.

Cindy wants to buy some peaches because some of her friends are visiting her next Saturday. She is planning to share the peaches equally among her friends. She has got enough money to buy 20 peaches. Cindy has got 4 friends and wants to know how many peaches she can give to each friend.

- **Division**

Number of peaches	divided by	number of friends	equals / is	…… so each kid will get …… peaches.

- **Multiplication**

Number of friends	times	number of peaches each kid may get	equals / is	…… so the peaches will be shared equally.

Elena went to the market and bought some candy for her kids. She is going to give each kid the same amount of candy. Elena has got 3 kids and bought 21 candies for them.

- **Division**

Number of ……	divided by	number of ……	equals / is	…… so each kid will get …… candies.

- **Multiplication**

Number of ……	times	number of …… each kid may get	equals / is	…… so the ..... will be shared equally.

You're up!

Read and answer the questions.

- **Note:** If you get a number **left**, write "… , **remainder** 1."

Ex.

$$\begin{array}{r} 2 \\ 4 \overline{)\,9} \\ 1 \end{array}$$

9 divided by 4 is 2, remainder 1.

Remainder

Lila has 28 cookies. She wants to put the same number of cookies on 3 plates.

How many total cookies are on each plate?

Division	Multiplication

Carol has 48 cupcakes. He needs to divide them among 5 people.

How many cupcakes should each person get?

Division	Multiplication

Morgan has 83 oranges that must be put away in boxes. She has 9 boxes.

How many oranges must go in each box?

Division	Multiplication