

Year 8 foundation passport to success - due

Question 1 - (3 marks available)

$$\begin{array}{r} 89 \\ + 78 \\ \hline \end{array}$$

$$\begin{array}{r} 67 \\ + 45 \\ \hline \end{array}$$

$$\begin{array}{r} 94 \\ + 67 \\ \hline \end{array}$$

Question 2 - (3 marks available)

$$\begin{array}{r} 74 \\ - 45 \\ \hline \end{array}$$

$$\begin{array}{r} 63 \\ - 18 \\ \hline \end{array}$$

$$\begin{array}{r} 84 \\ - 27 \\ \hline \end{array}$$

Question 3 - (2 marks available)

Work out the answers to the following

a) 2.4×10

b) $2.4 \div 10$

Question 4 - (2 marks available)

Work out the answers to the following

a) 13.6×100

b) $13.6 \div 100$

Question 5 - (2 marks available)

Fill in the boxes to complete this multiplication:

$$\begin{array}{r} 8 \\ \times 63 \\ \hline 5 \\ 1 \\ \hline \end{array}$$

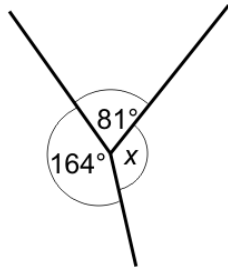
Question 6 - (1 marks available)

Work out the answer to

$$6 \overline{) 714}$$

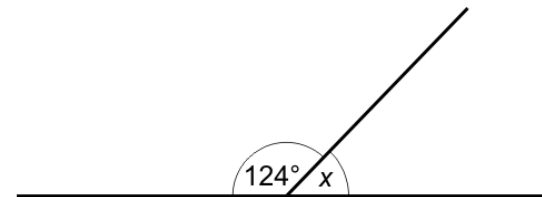
Question 7 - (1 marks available)

Find the size of angle x .



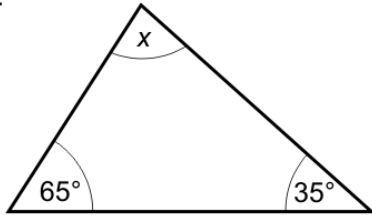
Question 8 - (1 marks available)

Find the size of angle x .



Question 9 - (1 marks available)

Find the size of angle x .

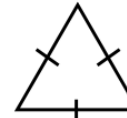


Question 10 - (3 marks available)

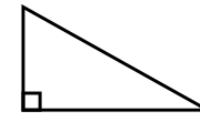
Here are some triangles.



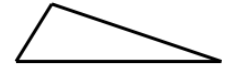
A



B



C



D

- Which of the shapes is a right-angled triangle?
- Which of the shapes is an isosceles triangle?
- Which of the shapes has three equal angles?

Question 11 - (3 marks available)

Round the following numbers to the nearest 10

- 83
- 127
- 245

Question 12 - (3 marks available)

Round the following numbers to the nearest 1000

- 4682
- 123361
- 56500

Question 13 - (2 marks available)

- Answer the following:
- a) $6 + 12 \div 3 =$
 - b) $(6 + 12) \div 3 =$

Question 14 - (3 marks available)

Simplify these expressions

- a) $5 \times x$
- b) $6 \times x \times y$
- c) $2 \times x \times 3 \times y$

Question 15 - (2 marks available)

Simplify these expressions

- a) $5x + 3x + 2y + 4y$
- b) $6x - 2x + 8y - 6y$

Question 16 - (4 marks available)

If I have this sequence 2, 4, 6, . . . I can describe the rule as

add 2

For each sequence below, describe the rule and write the next two terms.

- a) 2, 5, 8, ,

The rule is

- b) 23, 18, 13, ,

The rule is

Question 17 - (3 marks available)

Here is a list of numbers:

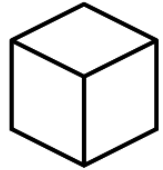
3 6 9 7 4 6 7 0 7

Find:

- a) the median
- b) the range
- c) the mode

Question 18 - (3 marks available)

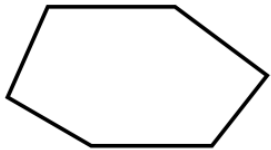
Complete the table to show the number of faces, edges and vertices for a cube.



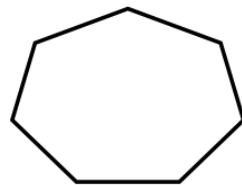
	Faces	Edges	Vertices
Cube			

Question 19 - (2 marks available)

What are the names of these polygons?



This is a

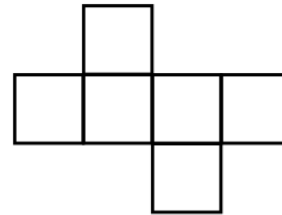


This is a

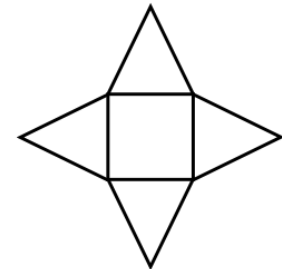
Question 20 - (2 marks available)

Write down the mathematical name of the shape made by each net.

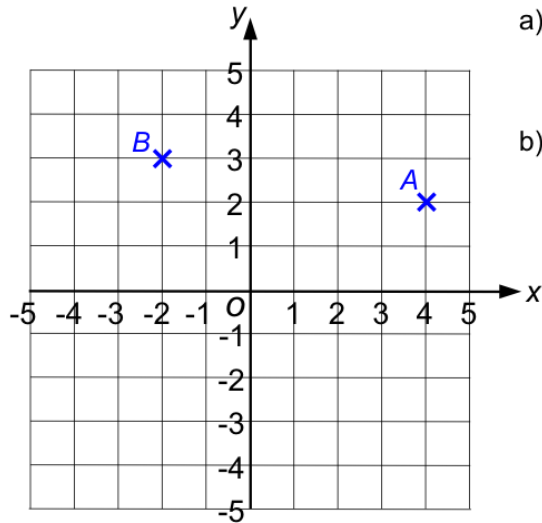
a)



b)



Question 21 - (2 marks available)



a) What are the coordinates of A?

b) What are the coordinates of B?

Question 22 - (1 marks available)

Write down first five multiples of 7.

Question 23 - (2 marks available)

Write down all the factors of 10.

Question 24 - (1 marks available)

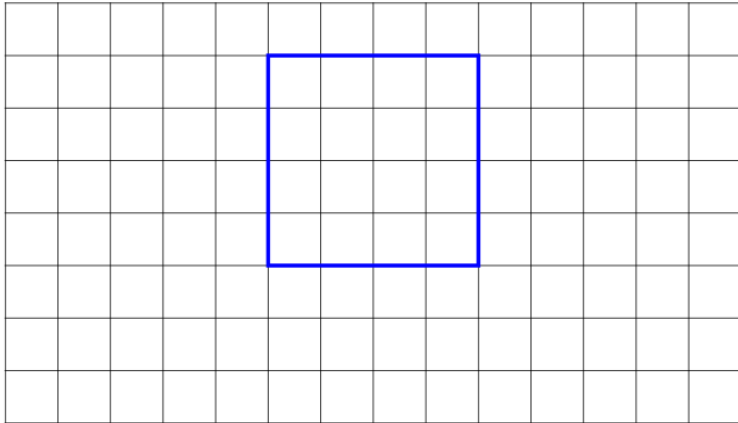
Here are some numbers:

4 6 7 15 21

Which number is a prime number?

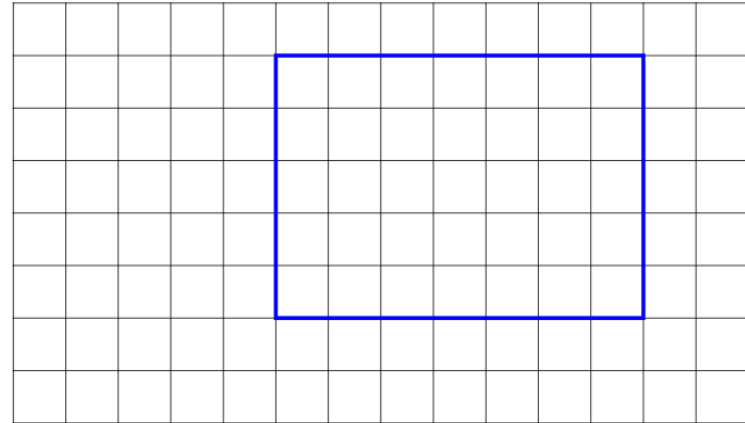
Question 25 - (1 marks available)

Find the perimeter of the square on the centimetre grid.



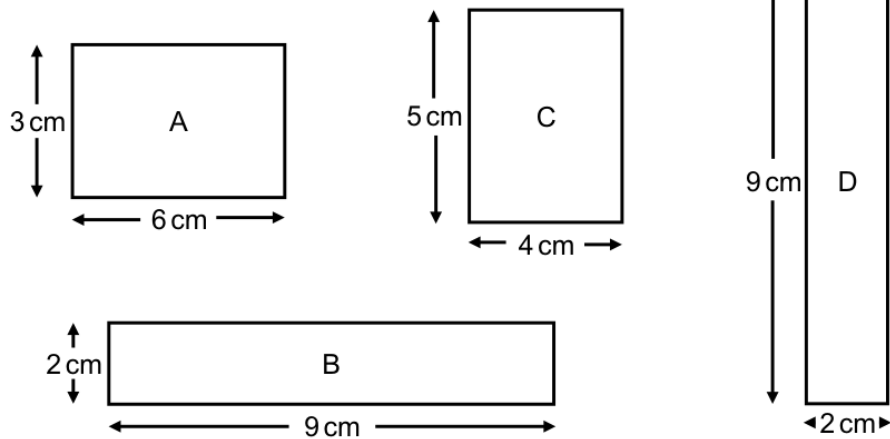
Question 26 - (1 marks available)

Find the area of the rectangle on this centimetre grid.



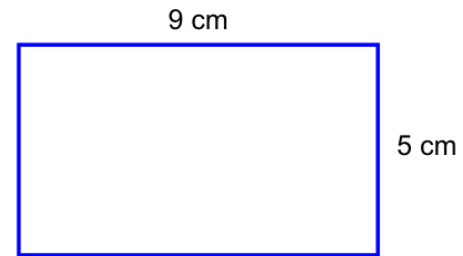
Question 27 - (3 marks available)

Which of the rectangles below have an area of 18 cm^2 ?



Question 28 - (1 marks available)

Find the perimeter of this rectangle.



Question 29 - (1 marks available)

Which of these two numbers is the largest?
4.12 or 4.21

Question 30 - (3 marks available)

Answer the following: a) $3 - 8 =$
b) $-6 - 4 =$
c) $-2 + 6 =$

Question 31 - (3 marks available)

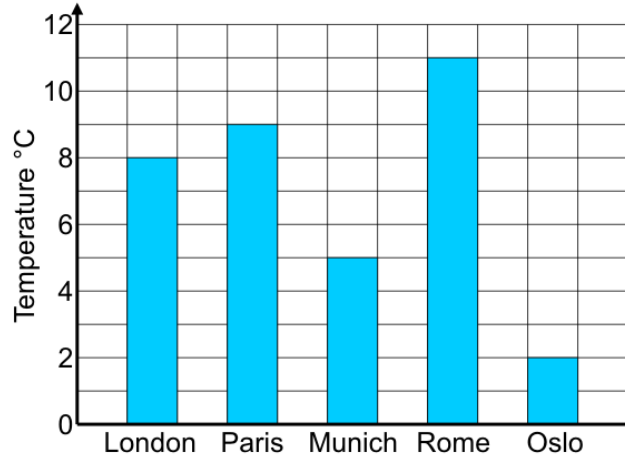
Answer the following: a) $2 \times -7 =$
b) $-3 \times 4 =$
c) $-5 \times -6 =$

Question 32 - (1 marks available)

If the temperature is 3°C and falls by 12°C , what is the new temperature?

Question 33 - (2 marks available)

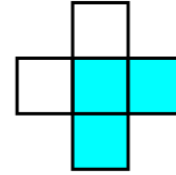
The temperatures at midday on March 1st in five cities are shown in the bar chart below.



- a) What is the difference in temperature between Rome and Munich?
- b) The temperature in Oslo rises by 5°C over the next 6 hours. What is the temperature in Oslo at 6pm?

Question 34 - (1 marks available)

What fraction of the shape is shaded?

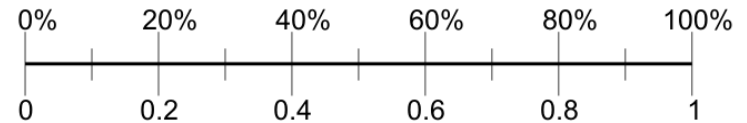


Question 35 - (1 marks available)

Write the fraction $\frac{15}{25}$ in its simplest form.

Question 36 - (2 marks available)

The scale shows both percentages and decimals.



Fill in the missing decimals in the gaps below.
The first one is done for you.

40% is the same as 0.4

90% is the same as

7% is the same as

Question 37 - (2 marks available)

Work out

- a) $\frac{2}{5}$ of 60
- b) $\frac{1}{4}$ of 60

Question 38 - (2 marks available)

Find

- a) 50% of £80
- b) 25% of £80

Question 39 - (1 marks available)

Work out 30% of £70

Question 40 - (1 marks available)

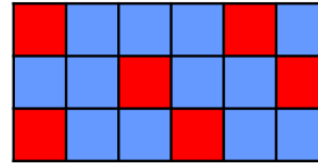
Cans of pop cost 35p each.
How much will 8 cans cost?

Question 41 - (2 marks available)

Pens cost 20p each and pencils cost 12p each.
If I buy 6 pens and 5 pencils what will be the total cost?

Question 42 - (1 marks available)

What is the ratio of red to blue squares in its simplest form?



Red Blue
:

Question 43 - (1 marks available)

The ratio 15 : 3 in its simplest form is :

Question 44 - (2 marks available)

Find the value of x in each of the following

a) $x + 3 = 8$

b) $x - 5 = 7$

Question 45 - (2 marks available)

Find the value of x in each of the following

a) $2x = 10$

b) $3x = 27$

Question 46 - (4 marks available)

Find the value of x in each of the following

a) $2x - 7 = 13$

b) $3x + 4 = 25$

Question 47 - (2 marks available)

A train leaves Ayr station every day at 09:24 and arrives in Glasgow at 10:10

How long is the journey?

Question 48 - (1 marks available)

How many metres are there in a kilometre?