





Section One

Section Two

Times tables

Number line

Key skills

Problem solving

Fluency

Exam question

Fraction of...

Formula

Times tables

 $6 \times 5 =$

 $17 \times 3 =$

 $40 \times 20 =$

 $2 \mid 8 \times 4 =$

 $15 \times 5 =$

 $35 \times 4 =$

 $3 \mid 3 \times 7 =$

 $8 \mid 25 \times 8 =$

 $45 \times 4 =$

 $5 \times 12 =$

 $20 \times 7 =$

 $8 \times 8 =$

 $5 \mid 10 \times 8 =$

 $3 \times 70 =$

 $50 \times 9 =$

Key skills



3 Write 0.124 as a fraction.

Fluency

 $1 \mid 2 \times 7 \times 2 \times 5 =$

 $6 | 65^2 =$

2 5 675 + 999 =

 $7 \mid 360 \div 5 =$

3 5 675 - 999 =

8 6% *of* 400 =

 $4 \mid 40 \times 39 =$

9 $38\% \ of \ 50 =$

5 $0.8 \times 0.7 =$

10 $3.8 \times 5 =$

Fraction of...



$$\frac{1}{2}$$
 of $40 =$

$$\frac{1}{2} \ of \ 48 =$$

$$\frac{2}{3} \times 144 =$$

$$\frac{1}{2} \times 70 =$$

$$\frac{1}{3} \times 72 =$$

$$\frac{2}{5}$$
 of 6.5 =

$$\frac{1}{2}$$
 of 7 =

$$\frac{1}{4} \times 116 =$$

$$\frac{2}{3}$$
 of $\frac{2}{5}$ =

$$\frac{1}{3}$$
 of $60 =$

$$\frac{1}{5}$$
 of 135 =

$$\frac{5}{9} \times 63 =$$

$$\frac{1}{5} \times 40 =$$

$$\frac{1}{6} \times 96 =$$

$$\frac{1}{35} \times \frac{1}{35} =$$

Reflection



Reflect on the first section.

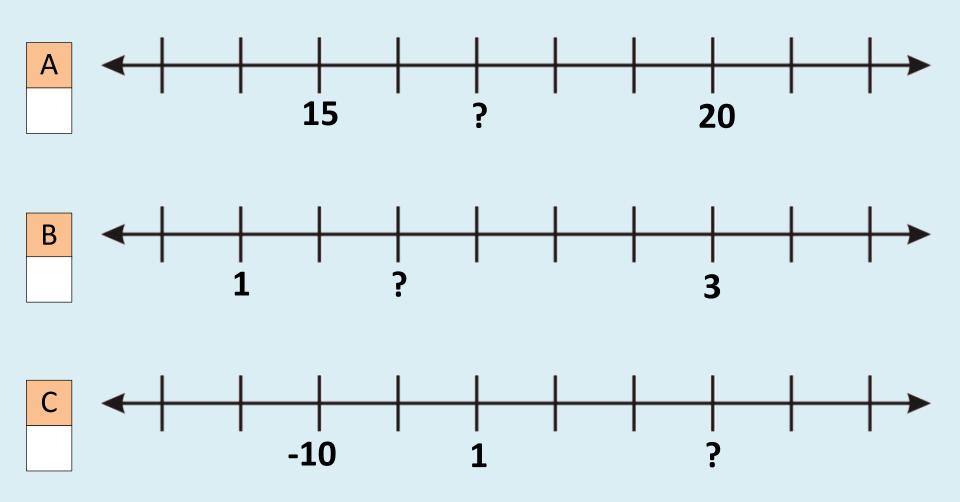
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Number line



What is the marked unknown number on the number line?

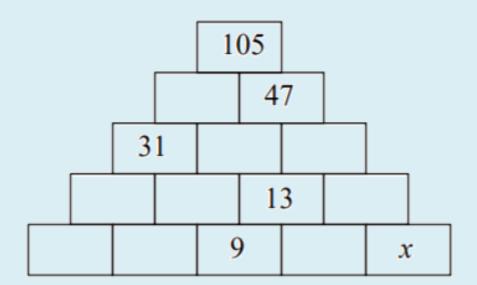


Problem solving UKMT Junior Maths Challenge 2015



1 In this partly completed pyramid, each rectangle is to be filled with the sum of the two numbers in the rectangles immediately below it. What number should replace x?

3 12



Problem solving Kangaroo of mathematics 2009



2 Harry delivers newspapers in Long street. He must deliver a paper to every house with an odd house number. If the first house is number 15 and the last is number 53, to how many houses does Harry deliver?

Α

В

20

27

38

53



3 \

My fruit basket contains apples and oranges.

The ratio of apples to oranges in the basket is 3:8.

When I remove one apple the ratio changes to 1:3.

How many oranges are in the basket?

Exam question



1

Sean works for a company.

His normal rate of pay is £12 per hour.

When Sean works more than 8 hours a day, he is paid overtime for each hour he works more than 8 hours.

Sean's rate of overtime pay per hour is $1\frac{1}{4}$ times his normal rate of pay per hour.

On Monday Sean worked for 10 hours.

Work out the total amount of money Sean earned on Monday.

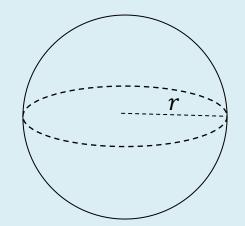
(4 marks)





Volume of a sphere $=\frac{4}{3}\pi r^3$

- 1 Calculate the volume of a sphere with a radius of 3cm.
- 2 Calculate the volume of a sphere with a radius of 6cm.



- 3 A sphere has a volume of $1000cm^3$, calculate the radius.
- 4 Calculate the volume of a hemisphere with a radius of 8cm.
- The radius of a sphere is doubled, what happens to the volume of the sphere?
- 6 What is the radius of a sphere with a volume of $1m^3$? Give you answer in cm.

End of lesson



Well done for completing the lesson.

