

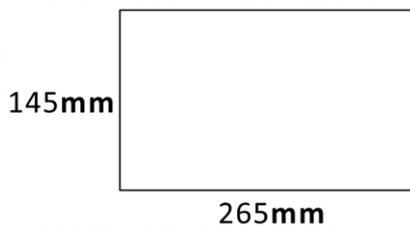
71.1 PS



- 1) A bus holds 36 seated passengers.
How many seated passengers fit onto 24 buses?
Each bus also has space for two passengers in wheelchairs and 14
passengers standing. How many passengers in total fit onto 24 buses?

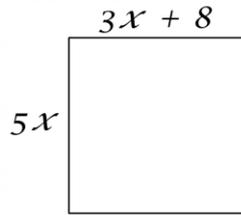
- 2) The formula for finding the speed, v , of an object at different times is $v = 20 + 4t$
Find the speed when the time, t , is 6 seconds.

- 3) What is the perimeter, in **cm**, of this rectangle:





- 1) Find an expression for the area of this shape:



If $x = 4$, what can you say about the shape?

- 2) Cal reads a book that has 212 pages. Each page has 36 lines, and each line has an average of 11.4 words per line.

Estimate, by rounding numbers to one significant figure, how many words there are in the book.

If it takes him 6 hours and 40 minutes to read the book, roughly how many words does he read in a minute?

- 3) Andrei was given a sequence of numbers, with each number written on an individual piece of paper. He lost one number and mixed up the other numbers.

The numbers he had left were 39, 31, 23, and 27. Which number did he lose?

73.1 PS



- 1) Oscar has 120 marbles. $\frac{1}{10}$ of them are red and $\frac{2}{5}$ are green.

The rest are purple.

How many are red?

How many are purple?

- 2) Which is bigger $4^2 + 4^3$ or 3^4 ? And by how much?

- 3) A medicine spoon holds 5ml. How many spoonfuls would be needed to fill up a litre bottle?

74.1 PS



- 1) Cailey's pet gerbil is $4\frac{2}{5}$ inches long and India's pet giant snail is $\frac{40}{9}$ inches long.
Whose pet is longer? And by how much?

- 2) How many seconds are there in one day?

- 3) Tamsin has completed a triathlon. She swam for 750m, cycled for 19.4km and ran for 5000m. What was the total distance, in km, of her triathlon?

75.1 PS



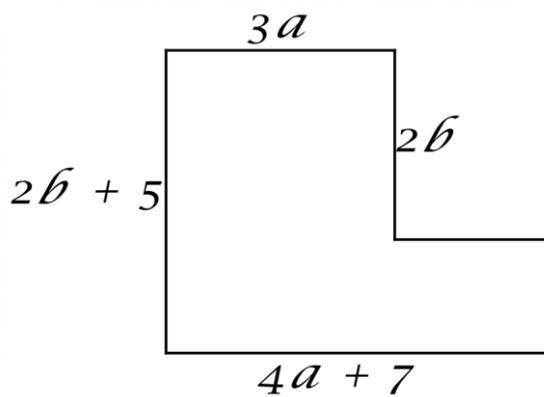
1) Insert brackets to make each of these calculations correct.

$$5 \times 3 - 1 = 10$$

$$3 + 6 - 2 \div 2 = 3.5$$

2) What are the factors of the 6th multiple of the 5th prime number?

3) What is the expression for perimeter of the following shape?





1) What is one sixth of one fifth of one quarter of one third of one half of 120?

2) How many days are there in 12 years?

3) Work out the following:

$$1\frac{1}{2} \times \frac{2}{3}$$

$$2\frac{2}{3} \times \frac{3}{4}$$

$$3\frac{3}{4} \times \frac{4}{5}$$

Following this pattern, can you get the answer 10? Or 49?

76.1 PS



- 1) Amber, Ollie and Lexi are doing a sponsored walk. They set off together. Amber takes 6 minutes and Ollie takes 8 minutes to complete a lap. Assuming they don't change their walking speeds, after how long will they first cross the start line together?

If it takes two hours before all three of them cross the line together, what is the shortest possible time that Lexi takes to walk a lap?

- 2) Daniel has some containers that hold water. He has five bottles that hold 330ml each and he has also has four two-litre bottles. How much water, in litres, does he have altogether?

- 3) Zaara says that the point $(5 , 24)$ lies on the line $y = 5x - 1$
Is she correct?
Huxley says that the point $(12 , 100)$ is above that line.
Is he correct?



- 1) Jasper thinks of a number. He multiplies by 2, then he adds 4 and finally he multiplies that by 6. His result was 72.
What was his original number? (let x be his original number)

- 2) Isabel's dog, Titus, eats $\frac{3}{4}$ of a tin of dog food a day. How many tins does he eat in 4 weeks?
If a tin costs £1.30, how much does it cost Isabel to feed him each week?
If there is a 15% reduction in the price of a tin, how much would she save?

- 3) Marco makes some fruit punch. He uses 750 ml of cranberry juice, 0.45 litres of pineapple juice, 320 ml of orange juice and 1.3 litres of lemonade.
How many litres of fruit punch does Marco make?

Marco pours the punch into glasses that can each hold 180 ml of liquid. How many whole glasses can he fill and how much does he have left over?