

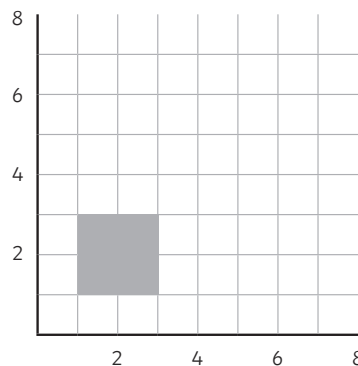
1  
Mr Crudge needs to pick a team of two boys and one girl from his maths class. His maths class consists of 17 boys and 13 girls. How many different teams could he pick?



3  
A car travels  $x$  km in  $y$  hours. Find its speed in m/min.



4  
Enlarge the square by a scale factor of  $-\frac{1}{2}$ , using (5,5) as the centre of enlargement.




6  
Express as a single power of 2:

a)  $\frac{16^4 \times 8^5}{64^6}$

b)  $\frac{1}{\sqrt[3]{2}}$

5  
The table gives information about the probability of picking a blue, red or green counter when picking at random from a bag which contains only blue, red and green counters:

Colour	Blue	Red	Green
Probability	0.2		0.4

a) If there are 20 counters altogether, how many of the counters are red?

b) Two counters are drawn out of the bag, one after the other. Find the probability that they are both red.

6  
Simplify:

$$\frac{x^2 + 7x + 10}{x^2 - 3x - 10}$$

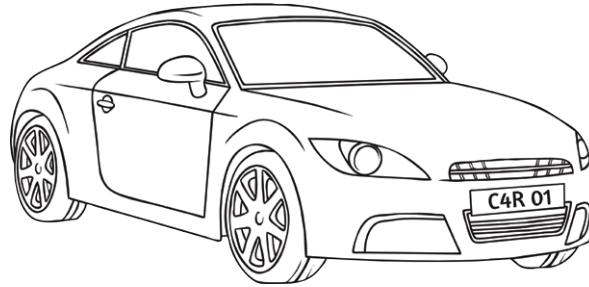
1 Mr Crudge needs to pick a team of two boys and one girl from his maths class. His maths class consists of 17 boys and 13 girls. How many different teams could he pick?

$$(17 \times 16) \div 2 \times 13 = 1768$$

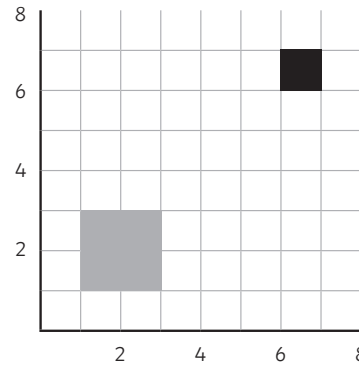


3 A car travels  $x$  km in  $y$  hours. Find its speed in m/min.

$$\frac{50x}{3y} \text{ m/min}$$



4 Enlarge the square by a scale factor of  $-\frac{1}{2}$ , using (5,5) as the centre of enlargement.



Vertices at (7, 7) (7, 6) (6, 7) and (6, 6)

6 Express as a single power of 2:

a)  $\frac{16^4 \times 8^5}{64^6}$

$$2^{-5}$$

b)  $\frac{1}{\sqrt[3]{2}}$

$$2^{-\frac{1}{3}}$$

5 The table gives information about the probability of picking a blue, red or green counter when picking at random from a bag which contains only blue, red and green counters:

Colour	Blue	Red	Green
Probability	0.2		0.4

a) If there are 20 counters altogether, how many of the counters are red?

8

b) Two counters are drawn out of the bag, one after the other. Find the probability that they are both red.

$$\frac{14}{95}$$

Simplify:

$$\frac{x^2 + 7x + 10}{x^2 - 3x - 10}$$

$$\frac{x + 5}{x - 5}$$