

CARD 1

Jude and Jake share some prize money in the ratio 3:7. If Jake gets £28 more than Jude, how much money does Jude get?

FOUNDATION RELAY 1**CARD 2**

Two fair dice are rolled and the difference score is the higher of the two numbers

	1	2	3	4	5	6
1	1			4		
2		2				
3			3	4		
4			4	4		
5					5	
6		6				6

Work out the probability that the score is 5 or 6

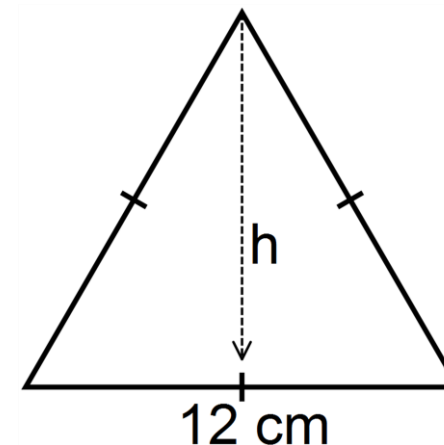
FOUNDATION RELAY 1**CARD 3**

Find the nth term of the sequence

11, 15, 19, 23, 27....

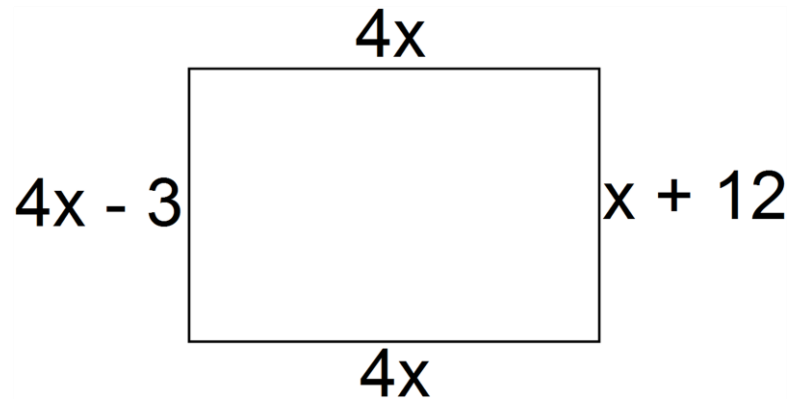
FOUNDATION RELAY 1**CARD 4**

Calculate the height of the triangle (2d.p)

**FOUNDATION RELAY 1**

CARD 5

Calculate the area of the rectangle

**FOUNDATION RELAY 1****CARD 6**

A piece of metal has a volume of 80 cm^3 and a mass of 400g .

Calculate the density of the metal

FOUNDATION RELAY 1**CARD 7**

Rana bought a car for $\pounds 5500$ and sold it 1 year later for $\pounds 4675$.

Calculate the percentage loss.

FOUNDATION RELAY 1**CARD 8**

Simplify

a) $3y^2 \times 4y^3$

b) $16y^8 \div 2y^4$

c) $(2y^4)^2$

FOUNDATION RELAY 1

CARD 9

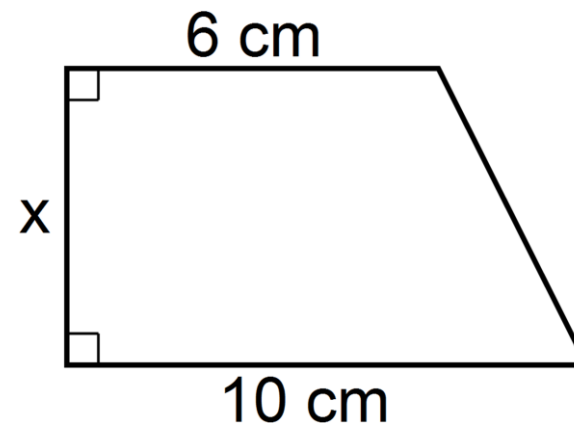
Work out

$$\frac{4}{15} \div \frac{2}{3}$$

FOUNDATION RELAY 1

CARD 10

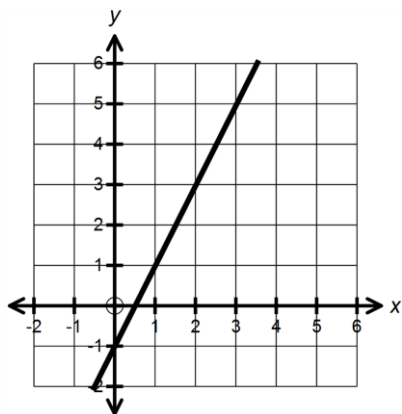
The area of the trapezium is 40 cm^2 . Calculate x



FOUNDATION RELAY 1

CARD 11

Find the equation of the straight line



FOUNDATION RELAY 1

CARD 12

Work out

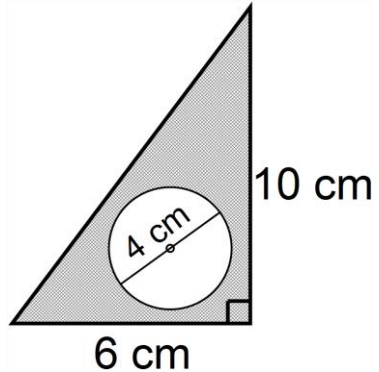
$$\frac{10^2 - 5 \times (2 + 6)}{20 - 2^3}$$

FOUNDATION RELAY 1

CARD 13

Calculate the shaded area

Answer correct to 2 decimal places

**FOUNDATION RELAY 1****CARD 14**

- Express 24 and 32 as a product of primes
- Find the Lowest Common Multiple of 24 and 32

FOUNDATION RELAY 1**CARD 15**

Calculate the angles needed to draw a pie chart to represent the following data

Country	Frequency
France	16
Spain	14
Portugal	9
Belgium	21

FOUNDATION RELAY 1**CARD 16**

Round each of the following to 1 significant figure

- 73642
- 105911
- 15.4998
- 0.06824

FOUNDATION RELAY 1

CARD 17

Make x the subject of the formula

$$w = ax - c$$

FOUNDATION RELAY 1

CARD 18

Factorise and solve

$$x^2 - 2x - 15 = 0$$

FOUNDATION RELAY 1

CARD 19

Solve simultaneously

$$x + 3y = 17$$

$$2x + y = 9$$

FOUNDATION RELAY 1

CARD 20

BBQ 2 GO sells 8 burgers for £2.80

GRILL BAR sells 6 burgers for £2.05

Which shop is better value for money?

FOUNDATION RELAY 1

CARD 1

Jude and Jake share some prize money in the ratio 3:7. If Jake gets £28 more than Jude, how much money does Jude get? **£21**

FOUNDATION RELAY 1

CARD 2

Two fair dice are rolled and the difference score is the higher of the two numbers

	1	2	3	4	5	6
1	1	2	3	4	5	6
2	2	2	3	4	5	6
3	3	3	3	4	5	6
4	4	4	4	4	5	6
5	5	5	5	5	5	6
6	6	6	6	6	6	6

Work out the probability that the score is 5 or 6

$$\frac{20}{36} = \frac{5}{9}$$

FOUNDATION RELAY 1

CARD 3

Find the nth term of the sequence

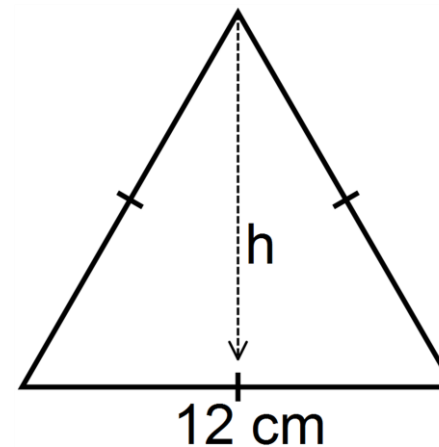
11, 15, 19, 23, 27....

$$4n + 7$$

FOUNDATION RELAY 1

CARD 4

Calculate the height of the triangle (2 d.p.)

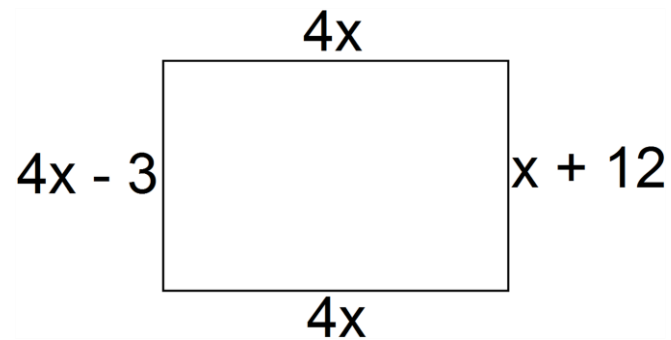


10.39 cm

FOUNDATION RELAY 1

CARD 5

Calculate the area of the rectangle



$$x = 5 \quad 17 \times 20 = 340 \text{ cm}^2$$

FOUNDATION RELAY 1

CARD 6

A piece of metal has a volume of 80 cm^3 and a mass of 400g .

Calculate the density of the metal
 5g/cm^3

FOUNDATION RELAY 1

CARD 7

Rana bought a car for $\pounds 5500$ and sold it 1 year later for $\pounds 4675$.

Calculate the percentage loss.

15%

FOUNDATION RELAY 1

CARD 8

Simplify

a) $3y^2 \times 4y^3$ $12y^5$

b) $16y^8 \div 2y^4$ $8y^4$

c) $(2y^4)^2$ $4y^8$

FOUNDATION RELAY 1

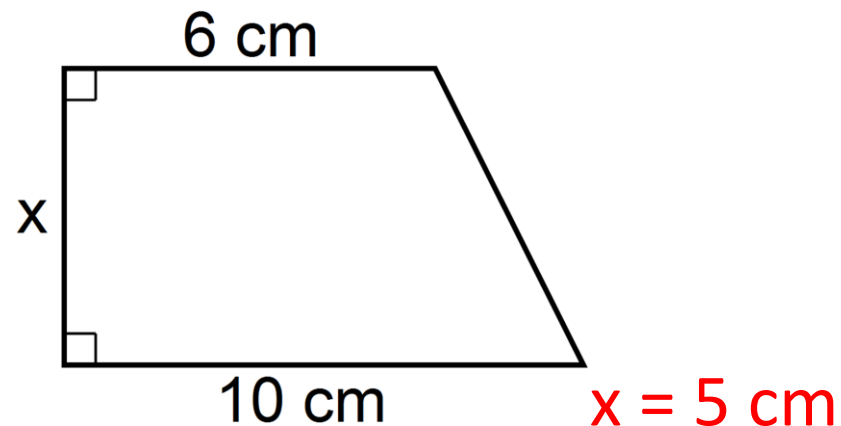
CARD 9

Work out

$$\frac{4}{15} \div \frac{2}{3}$$

$$\frac{2}{5}$$

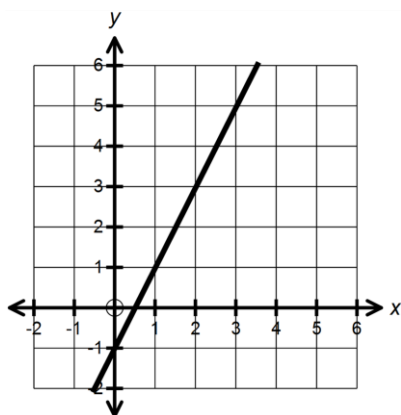
FOUNDATION RELAY 1

CARD 10The area of the trapezium is 40 cm^2 . Calculate x 

FOUNDATION RELAY 1

CARD 11

Find the equation of the straight line



$$y = 2x - 1$$

FOUNDATION RELAY 1

CARD 12

Work out

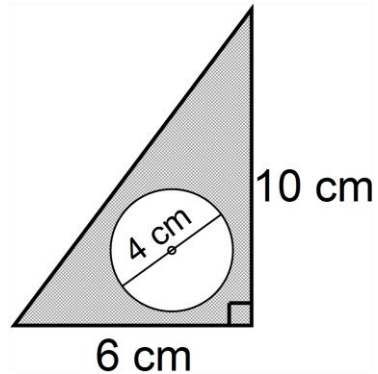
$$\frac{10^2 - 5 \times (2 + 6)}{20 - 2^3} \quad 5$$

FOUNDATION RELAY 1

CARD 13

Calculate the shaded area

Answer correct to 2 decimal places



17.43 cm²

FOUNDATION RELAY 1

CARD 14

a) Express 24 and 32 as a product of primes **$24 = 2^3 \times 3$** **$32 = 2^5$**

b) Find the Lowest Common Multiple of 24 and 32 **$2^5 \times 3 = 96$**

FOUNDATION RELAY 1

CARD 15

Calculate the angles needed to draw a pie chart to represent the following data

Country	Frequency
France	16 96°
Spain	14 84°
Portugal	9 54°
Belgium	21 126°

FOUNDATION RELAY 1

CARD 16

Round each of the following to 1 significant figure

a) 73642 **70000**

b) 105911 **100000**

c) 15.4998 **20**

d) 0.06824 **0.07**

FOUNDATION RELAY 1

CARD 17

Make x the subject of the formula

$$w = ax - c$$

$$x = \frac{w+c}{a}$$

FOUNDATION RELAY 1

CARD 18

Factorise and solve

$$x^2 - 2x - 15 = 0$$

$$(x - 5)(x + 3) = 0 \quad x = 5 \quad x = -3$$

FOUNDATION RELAY 1

CARD 19

Solve simultaneously

$$x + 3y = 17$$

$$2x + y = 9$$

$$x = 2 \quad y = 5$$

FOUNDATION RELAY 1

CARD 20

BBQ 2 GO sells 8 burgers for £2.80

GRILL BAR sells 6 burgers for £2.05

Which shop is better value for money?

BQ 2 GO 24 for £8.40

GRILL BAR 24 for £8.20 BETTER VALUE

FOUNDATION RELAY 1