1 **Write the following as percentages**

a	$\frac{17}{100}$	f	$\frac{19}{25}$
b	$\frac{35}{100}$	g	$\frac{19}{50}$
c	$\frac{17}{50}$	h	$\frac{31}{50}$
d	$\frac{23}{50}$	i	$\frac{16}{25}$
e	$\frac{8}{25}$	j	$\frac{29}{100}$

2 **Write the numbers below correct to one decimal place.**

a	23.932	f	18.7613
b	47.098	g	50.092
c	91.992	h	29.578
d	930.019	i	9281.291
e	182.928	j	1928.712

3 **Work out the value of the following**

a	7^2	e	6^3	i	2^6	m	8^4
b	5^2	f	8^3	j	4^5	n	3^5
c	8^2	g	9^3	k	3^4		
d	9^2	h	9^5	l	5^7		

4 **Convert the following lengths into cm.**

a	45mm	f	8m	k	6.2mm	p	2km
b	75mm	g	5m	l	93.8mm	q	8km
c	37mm	h	3.5m	m	61.3mm		
d	52mm	i	6.7m	n	27.56m		
e	70mm	j	8.4mm	o	82.91m		

5 **Change the following millilitres into litres**

a	4000ml	f	2750ml	k	380ml	p	842ml
b	6000ml	g	1928ml	l	275ml	q	9401ml
c	8500ml	h	8291ml	m	178ml		
d	3500ml	i	785ml	n	29ml		
e	7250ml	j	950ml	o	84ml		

6 Convert the following kilograms into grams

a	2kg	h	81.93kg	o	0.037kg
b	7kg	i	1.89kg	p	0.056kg
c	12kg	j	83.1kg	q	0.003kg
d	8.5kg	k	0.834kg	r	0.005kg
e	6.8kg	l	0.728kg	s	0.004kg
f	12.6kg	m	0.82kg		
g	13.9kg	n	0.91kg		

7 I pick out a red, green and blue counter from a bag. There are only three counters in the bag. List all the possible permutations of the counters that I could pick.

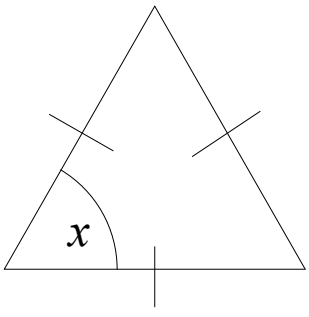
First Counter	Second Counter	Third Counter

8 Neil drives … miles in … hours. What is his average speed?

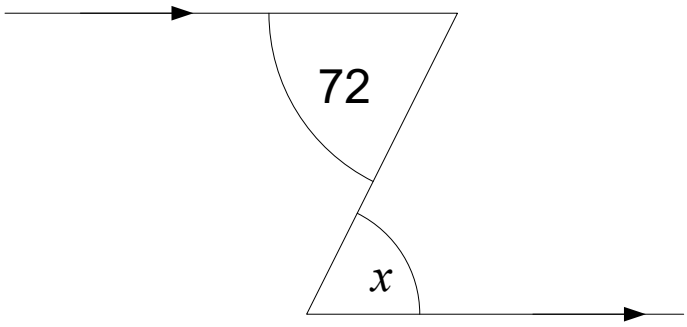
a	40 miles in 2 hours	g	120 miles in 3 hours
b	60 miles in 2 hours	h	150 miles in 3 hours
c	90 miles in 2 hours	i	200 miles in 5 hours
d	50 miles in 2 hours	j	200 miles in 4 hours
e	80 miles in 4 hours	k	180 miles in 5 hours
f	60 miles in 5 hours		

9 Work out the size of the angles marked x below and state the reasons why.

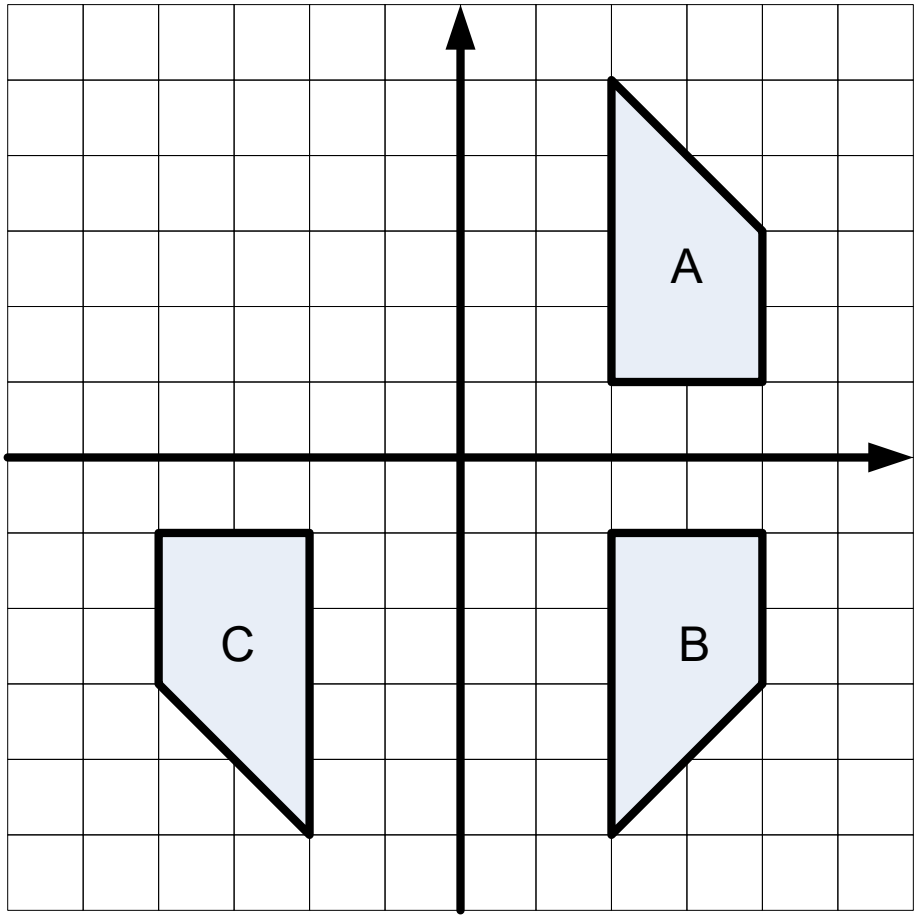
a



b



10 Describe fully the transformations stated below.



a Describe fully the single transformation that maps A to B.

b Describe fully the single transformation that maps B to C.

c Describe fully the single transformation that maps A to C.

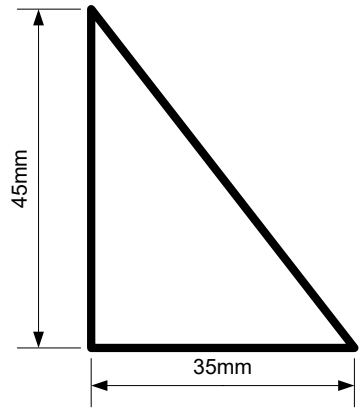
11 Billy buys a car for £20,000. He pays 20% deposit. He pays the rest off in twelve equal instalments. How much is each instalment?

12 Yvonne buys a fridge freezer. She pays 25% deposit and then pays the rest of the cost off in 6 equal instalments of £60. How much did the fridge cost altogether?

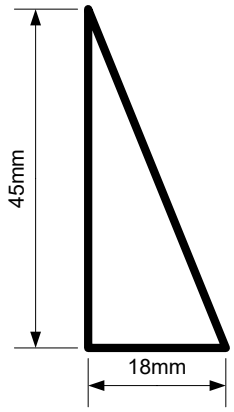
13 Ellie pays a 20% deposit for a car of £3000. She pays the rest of the cost in nine equal instalments. How much is each instalment?

14 Calculate the area of the following triangles.

a



b



c