FOCUS 4 TASKS - Set 4

Each of the 30 topics is covered once within the 5 sheets

Sheet 4A

Two Way Tables	Q1
Compound Measures	Q2
Reflections	Q3
Expanding Double Brackets	Q4
Probability from a Table	Q5
Circles	Q6

Sheet 4B

Estimation
Expand and Simplify
Alternate and Corresponding Angles
Rotations
Averages from Grouped Data
Plans and Elevations

Sheet 4C

Scatter Graphs	Q1
Sequences - nth term	Q2
Pythagoras	Q3
Product of Prime Factors	Q4
Exchange Rates	Q5
Equivalence	Q6

Sheet 4D

Proportion
Trigonometry
Linear equations
Index Laws
Standard Form
Straight Line Graphs

Sheet 4E

Averages from a Table	Q1
Inequalities	Q2
Translations	Q3
Volume	Q4
Enlargements	Q5
Use of Calculator (inc percentages)	Q6

FOCUS 4 TASK 4A

NAME .....

SKILLS CHECK

1) 56.4 + 34.7 =	2) 60.7 – 13.5	3) 54×38
4) $770 \div 22$	5) $\frac{5}{6} \div \frac{1}{4}$	6) What is the value of the underlined figure 4.0<u>5</u>6?
7) 2.5% of £40	8) A road 5 km long is shown on a map with scale 1:500000. What is the length of the road on the map?	9) Divide £234 in the ratio 4 : 9

QUESTION 1

Complete the two-way table

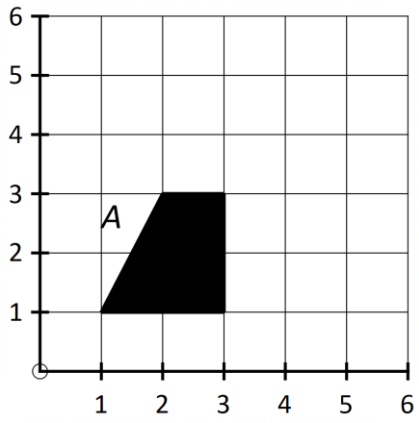
	205		192	600
Maths		63		
PE	85	72		197
Art	39		68	
	Y7	Y8	Y9	

QUESTION 2

A car travels for 1 hour 36 minutes at an average speed of 45 mph. Calculate the distance travelled

QUESTION 3

Reflect the trapezium A in the line x = 3. Label your trapezium B



QUESTION 4

Expand and simplify

$$(x-2)(x+8)$$

QUESTION 5

The table shows the probability of scoring different numbers on a spinner

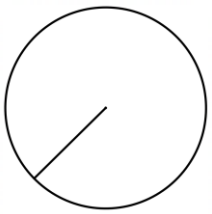
Number	0	5	10	15
Probability	$\frac{2}{9}$	$\frac{5}{18}$	$\frac{1}{3}$	

Calculate the probability of scoring a 15

Calculate the probability scoring less than 10

QUESTION 6

Calculate the circumference of the circle (correct to 1 d.p.)



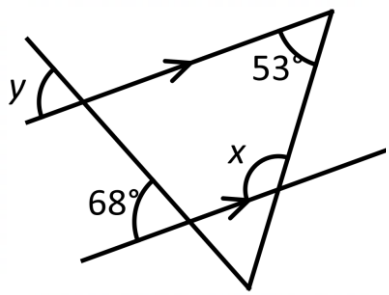
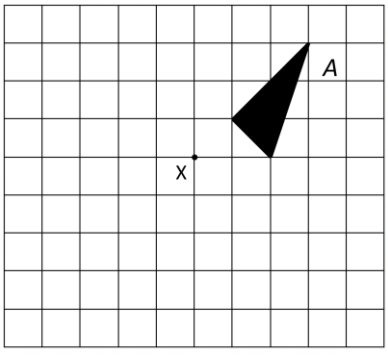
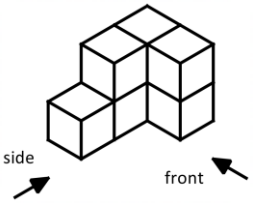
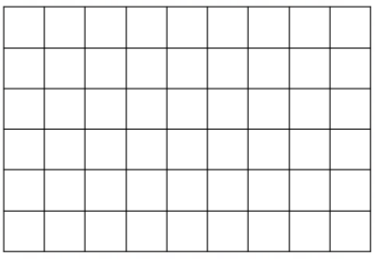
radius = 8 cm

FOCUS 4 TASK 4B

NAME .....

SKILLS CHECK

1) 45.9 + 152.6 =	2) 607 – 138.2	3) 68×54
4) $1458 \div 27$	5) $\frac{6}{11} \div \frac{3}{11}$	6) What is the value of the underlined figure 20<u>2</u>8.65?
7) 7.5% of £60	8) A road 4 km long is shown on a map with scale 1:20000. What is the length of the road on the map?	9) Divide £275 in the ratio 5 : 6

QUESTION 1	QUESTION 2	QUESTION 3
Estimate $\frac{3.25 \times 1.98}{0.475}$	Simplify $3(4x - 2) - 2(x - 4)$	Calculate x and y 
QUESTION 4	**QUESTION 5**	**QUESTION 6**
Rotate triangle A through 90 clockwise about point X. Label your triangle B 	Calculate an estimate of the mean time	Draw the front and side elevation  

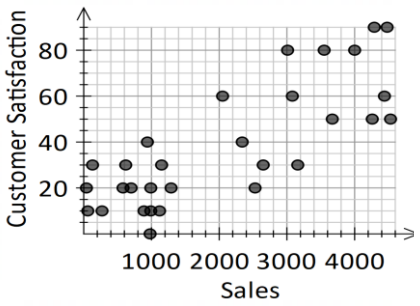
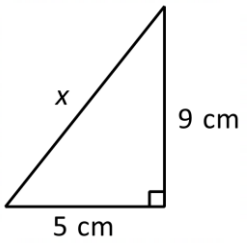
Time (s)	f		
$0 \le t < 15$	15		
$15 \le t < 30$	24		
$30 \le t < 45$	23		
$45 \le t < 60$	29		
$60 \le t < 75$	9		

FOCUS 4 TASK 4C

NAME .....

SKILLS CHECK

1) 121.5 + 205.9 =	2) 156 – 101.6 =	3) 56×66
4) $1026 \div 27$	5) $\frac{8}{5} \div \frac{10}{11}$	6) What is the value of the underlined figure 2.05<u>4</u>?
7) 0.5% of £50	8) A road 2.5km long is shown on a map with scale 1:500000. What is the length of the road on the map?	9) Divide £192 in the ratio 7 : 9

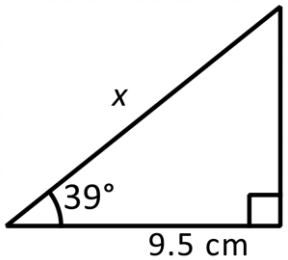
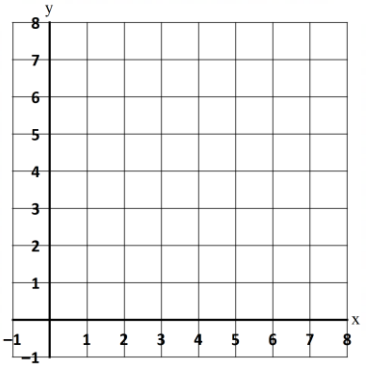
QUESTION 1	QUESTION 2	QUESTION 3
The graphs shows the relationship between sales and customer satisfaction. Plot the line of best fit and use this to estimate sales if customer satisfaction is 50  	Find the nth term of the sequence 2, 9, 16, 23, 30….. What is the 50th term in the sequence?	Calculate x correct to 1 decimal place 
QUESTION 4	**QUESTION 5**	**QUESTION 6**
Express 160 as a product of prime factors	If the exchange rate for GBP to Japanese Yen is £1 = ¥1.35 calculate £450 = ¥ ¥54 =	Express $\frac{17}{25}$ as a percentage Express 0.05 as a fraction in its lowest form

FOCUS 4 TASK 4D

NAME .....

SKILLS CHECK

1) 23.5 + 156.2 =	2) 600.2 – 459.8	3) 85×58
4) $1536 \div 32$	5) $\frac{5}{9} \div \frac{5}{27}$	6) What is the value of the underlined figure 2030.<u>4</u>2?
7) 2.5% of £250	8) A road 10 km long is shown on a map with scale 1:50000. What is the length of the road on the map?	9) Divide £585 in the ratio 5 : 4

QUESTION 1	QUESTION 2	QUESTION 3
A recipe for 9 pies uses 300g of flour. How much flour will be needed to make 15 pies?	Calculate x. Give your answer correct to 1 decimal place  	Solve $2x - 9 = 15 - x$
QUESTION 4	**QUESTION 5**	**QUESTION 6**
Simplify 4^{-3} $\frac{a^2 \times a^4}{a^3}$	Express in standard form 6500000000 0.0000108	Complete the table of values for $y = 2x - 3$ and plot the graph x | 1 | 2 | 5 y | | | 

FOCUS 4 TASK 4E

NAME .....

SKILLS CHECK

1) 666.6 + 333.4=	2) 207- 85.2	3) 45×45
4) $1216 \div 19$	5) $\frac{5}{4} \div \frac{3}{4}$	6) What is the value of the underlined figure 6.20<u>5</u>6?
7) 1.5% of £6050	8) A road 50km long is shown on a map with scale 1:200000. What is the length of the road on the map?	9) Divide £272 in the ratio 3 : 1

QUESTION 1

Calculate the mean

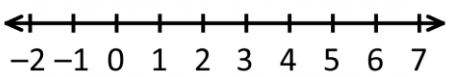
x	f	
10	12	
20	15	
30	11	
40	7	
50	5	

What is the median value?

QUESTION 2

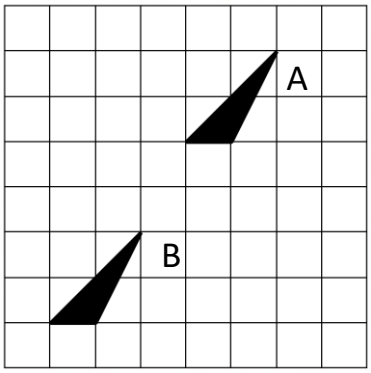
Solve the following inequality and represent the solution on the number line.

$$3x + 4 > x + 2$$



QUESTION 3

Describe fully the transformation which maps triangle A onto triangle B



QUESTION 4

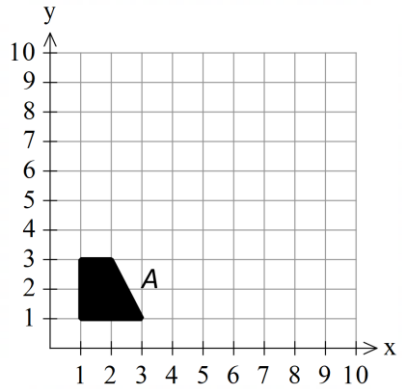
Calculate the volume of a sphere with diameter 10 cm.

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

Answer correct to 1 d.p.

QUESTION 5

Enlarge shape A using scale factor 3 and centre (0,0). Label your shape B



QUESTION 6

Give your answers correct to 1 decimal place

Work out

4000×1.02^3

$\sqrt[3]{45 \times 25.5}$