

- 1) a) If $b = 4$ and $r = -5$ find the value of:
- (i) $3b$
 - (ii) b^2
 - (iii) $5b^2$
 - (iv) $4b - 2r$
 - (v) $2(3b + r)$
 - (vi) $\frac{4b - r}{7}$
- (b) Colin said “when $y = 5$, then the value of $4y^2$ is 400”
Sue said “when $y = 5$, then the value of $4y^2$ is 100”
Who is right? Explain why.

2) Work out the answer to $38 - 3 \times 5$

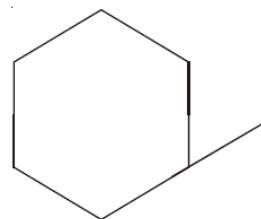
3) What is 2.3×0.12

4) a) Work out $\frac{6}{10}$ of 400

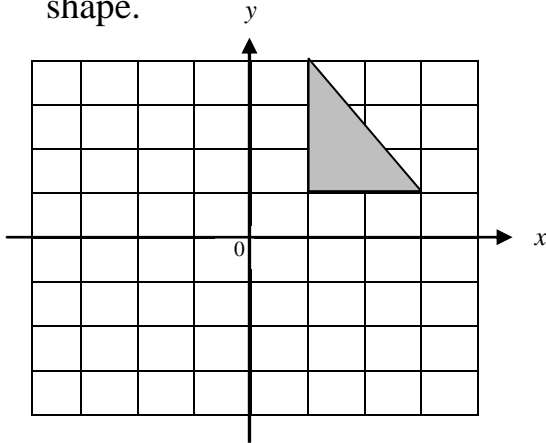
b) Work out $\frac{2}{6}$ of 600

c) Work out $\frac{3}{8}$ of 64

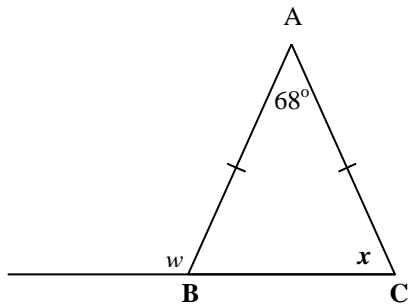
5) Find the exterior angle of this regular hexagon.



- 6) a) Reflect the shaded shape in the x axis and label it S.
 b) Rotate S 90° clockwise using $(0, 0)$ as the centre of rotation and label the new shape T.
 c) Describe fully the single transformation that will move T back onto the shaded shape.



- 6) 7) Find the size of the angles w and x , giving reasons.



- 8) a) Sara buys 34 litres of diesel at £1.43 per litre.
 How much does she spend altogether on diesel?
 b) Sid spends £57.12 on 41 litres of petrol.
 How much was each litre of petrol?
- 9) Find the following:
- a) 40% of £240
 b) 15% of £800
 c) 85% of £600
 d) 17.5% of £440

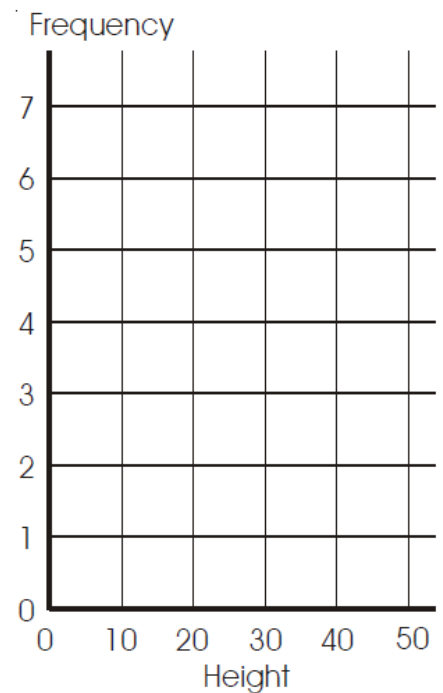
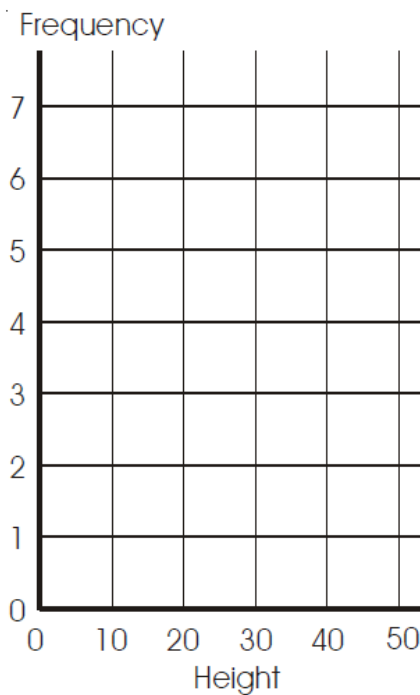
- 10) a) $\frac{3}{4} + \frac{1}{3}$
 b) $\frac{5}{7} + \frac{3}{5}$
 c) $\frac{3}{10} \times \frac{5}{8}$
 d) $\frac{4}{5} \div \frac{2}{10}$

11)

Height	Frequency
0 to 10	3
10 to 20	7
20 to 30	2
30 to 40	1

a) On the first set of axis draw a frequency diagram.

b) On the second set of axis draw a frequency polygon.



- 12) a) In a room there are 11 boys and 9 girls.
 What percentage of the children are boys?
 b) In a room there are 13 boys and 12 girls.
 What percentage of the children are girls
 c) Emma scores 54 marks out of 60 in a History test.
 What was her percentage score?

13) What are the first 5 terms of the number sequence with the n^{th} term of $4n - 2$?