

One of these answers is wrong. If you find it, [contact](#) me with the question number and correct answer.

1) a) If $b = 4$ and $r = -5$ find the value of:

(i) $3b$ 12

(ii) b^2 16

(iii) $5b^2$ 80

(iv) $4b - 2r$ 26

(v) $2(3b + r)$ 14

(vi) $\frac{4b-r}{7}$ 3

(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.

Sue is right. $4 \times 5^2 = 4 \times 25 = 100$

2) Work out the answer to $38 - 3 \times 5$ 175

3) What is 2.3×0.12 0.276

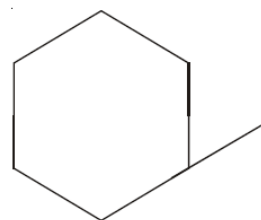
4) a) Work out $\frac{6}{10}$ of 400 240

b) Work out $\frac{2}{6}$ of 600 200

c) Work out $\frac{3}{8}$ of 64 24

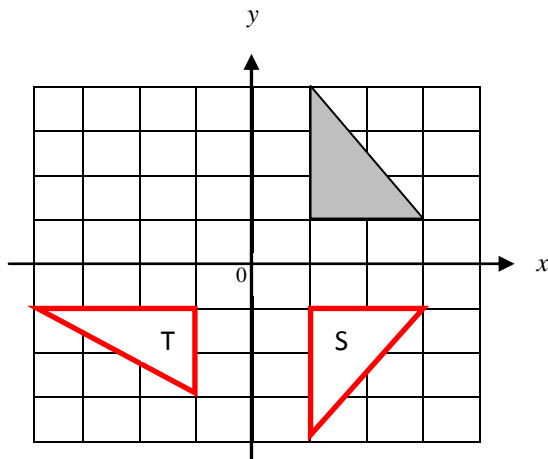
5) Find the exterior angle of this regular hexagon.

60°

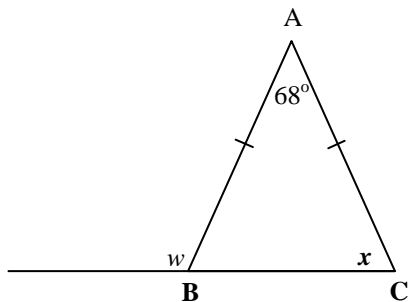


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- 6) a) Reflect the shaded shape in the x axis and label it S.
 b) Rotate S 90° clockwise using $(0, 0)$ as the centre of rotation and label the new shape T.
 c) Describe fully the single transformation that will move T back onto the shaded shape.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



- 6) 7) Find the size of the angles w and x , giving reasons. **$x = (180 - 68) \div 2 = 56^\circ$**



sum of angles in a (isosceles) triangle = 180°

$w = (180 - 56) = 124$

sum of angles on a straight line = 180°

- 8) a) Sara buys 34 litres of diesel at £1.43 per litre.
 How much does she spend altogether on diesel? **£48.62**
 b) Sid spends £57.12 on 41 litres of petrol.
 How much was each litre of petrol? **£1.39**

9) Find the following:

- a) 40% of £240 **£96**
 b) 15% of £800 **£120**
 c) 85% of £600 **£510**
 d) 17.5% of £440 **£77**

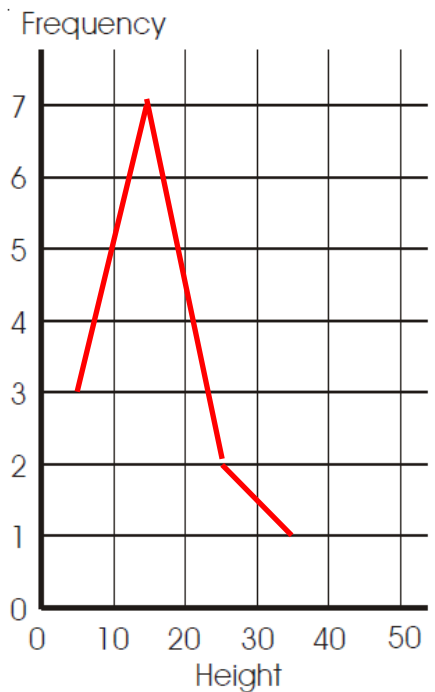
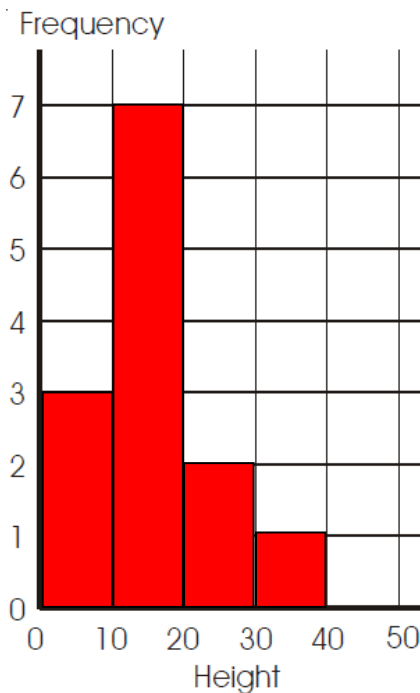
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- 10) a) $\frac{3}{4} + \frac{1}{3}$ $\frac{13}{12} = 1 \frac{1}{12}$
- b) $\frac{5}{7} + \frac{3}{5}$ $\frac{46}{35} = 1 \frac{11}{35}$
- c) $\frac{3}{10} \times \frac{5}{8}$ $\frac{15}{80} = \frac{3}{16}$
- d) $\frac{4}{5} \div \frac{2}{10}$ 4

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? 55%
- b) In a room there are 13 boys and 12 girls.
What percentage of the children are girls 48%
- c) Emma scores 54 marks out of 60 in a History test.
What was her percentage score? 80%

- 13) What are the first 5 terms of the number sequence with the n^{th} term of $4n - 2$?
2, 6, 10, 14, 18