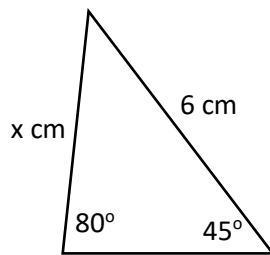YEAR 11 HOMEWORK – 4R

Complete the questions in each box. Make sure that you show all of your workings

1. Round 5.437 to 1 decimal place	2. Solve $12b + 5 = 8b + 13$
3. $(6) - (-4)$	4. Here are four numbers. -5 -3 3 5 Write one number in each box to make a correct calculation ☐ + ☐ = -2

5. Write down the next 2 terms: 20, 17, 14, 11, …	6. I have £100 to spend. I buy n books at £9 each. Write a formula for the amount of money, Q that I have left.
7. Find the highest common factor of 23 and 46	8. The ratio of adults to children on a train is 7 : 2. There are 245 adults on the train. Find the total number of people on the train.
9. Lesley records the number of texts she receives each day for 15 days. **Draw a stem and leaf diagram:** 13, 25, 16, 35, 28, 24, 13, 6, 27, 38, 20, 2, 13, 25, 31 **Find the range, median and mode**	10. Use sine rule to find x x cm 6 cm 80° 45°

11. The temperature of a fridge is checked regularly. Here are the rsesults	12. Solve the equation $x^2 + 5x + 6 = 0$

11. The temperature of a fridge is checked regularly. Here are the rsesults

Temperature °C	Frequency
$2.5 < t \le 3$	4
$3 < t \le 3.5$	25
$3.5 < t \le 4$	13
$4 < t \le 4.5$	5
$4.5 < h \le 5$	3

a) Write the modal class
b) Estimate the mean temperature

12. Solve the equation $x^2 + 5x + 6 = 0$

13. Solve the inequality

$$5x + 4 < 14$$

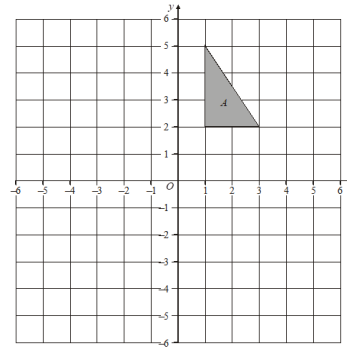**14.** The table shows the probabilities of scores on a biased dice.

No.	1	2	3	4	5	6
P	0.1	0.15	0.05	0.1	2x	x

Find the value of x

15. Six people take 5 days to pick a crop of oranges. How long would it take 4 people to pick the same crop?
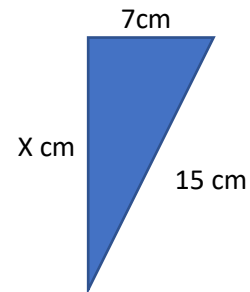
16. Calculate the speed of an object that moves 500km in 8 hours

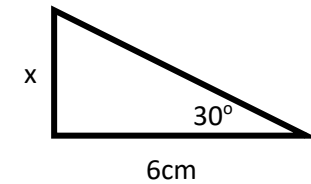**17.** Reflect the triangle in the line x =-1

18. A pack of 45 cakes costs £8.10. In a different shop, a pack of 30 cakes costs £6.00. Which pack is better value?

19. Use Pythagoras theorem to find the value of X

7cm

X cm

15 cm

20. Use trigonometry to find x

x

30°

6cm

WWW	
EBI 1	
EBI 2	