Day 255 **B Tier 10-a-day**

1 Simplify fully $\frac{9x^2}{3x}$

2 Here is a list of numbers.
92, 22, 97, 34, 36, 21, 10, 18
From the list, write down
(a) a factor of 60
(b) a prime number

3 A road is 2 km long.
It is drawn on a map with scale 1 : 25 000.
Work out the length of the road on the map, in cm.

4 (a) Ivan scores 23 out of 25 in a quiz. Write this as a percentage.
(b) Write 50p as a percentage of £4.

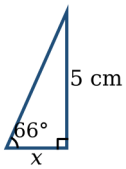
5 Complete the table of values for $y = x^2 - 2x + 4$

x	−2	−1	0	1	2	3
y			4	3		

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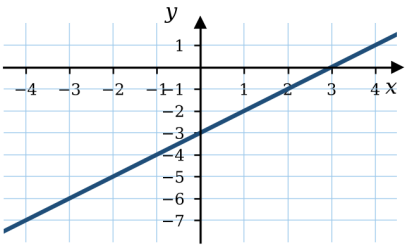
6 Two buses leave a bus station at 09:15.
One bus leaves every 20 minutes.
The other bus leaves every 6 minutes.
At what time do both buses next leave together?

7 Find the length of x. (Calculator)
Give your answer correct to 1 decimal place.
The diagram is not drawn accurately.



8 In a test, the mean mark of 9 boys is 66.
The mean mark of 6 girls is 61.
Work out the mean mark of all 15 students.

9 The diagram shows a straight line.
(a) Work out the gradient of the line.
(b) Find the equation of the line.



10 Harry earns £15 per hour for the first 36 hours worked each week.
Any extra hours are paid at time and a half.
Last week Harry worked 41 hours.
Work out Harry's total pay for last week.