

S1 Homework 31

1 Copy and complete this table: -

Fraction	$\frac{1}{2}$					
Decimal		0.25		0.1	0.17	
Percentage			75%			9%

2 Solve these equations:-

- a) $7x = 56$
- b) $x - 67 = 0$
- c) $3x + 9 = 36$
- d) $7x + 7 = 7$

3 A shopkeeper is checking his stock. He has only 6 cans of soup left on the shelves but he has three full boxes of cans of soup in his storeroom. He has 150 cans of soup altogether.

- a) Write an equation for this situation using **b** for the number of cans of soup in a box.
- b) Solve the equation to find how many cans of soup are in a box,

4 A car on a test track is driven flat out at its top speed of 144mph for 15 minutes.

- a) What distance does the car cover in this time?
- b) The test track is circuit with a length of 8 miles. How many laps of the circuit does the car complete?

5 In a school the ratio of boys to girls is 3:2. If there are 180 boys, how many girls are there?

6 If $c = 6$ and $d = 7$, calculate: -

- a) $10c + 5d$
- b) $c^2 + d^2$
- c) $c^2 + 5c + 10$
- d) $d^2 - 5d + 20$

7 A group of four friends pay £18.00 to see a film in a cinema. How much would it cost a group of seven to see the same film in the same cinema?

- 8 a) $\frac{1}{2} - \frac{2}{7}$
- b) $\frac{3}{7} + \frac{1}{5}$
- c) $\frac{5}{6} - \frac{3}{4}$
- d) $\frac{2}{3} + \frac{1}{8}$

[Junior Kangaroo 2015 Q1] Ben lives in a large house with his father, mother, sister and brother as well as 2 dogs, 3 cats, 4 parrots and 5 goldfish.

How many legs are there in the house?