



S3 Formal Homework 1

1. Find the following, giving your answer in its simplest form:

a. $2\frac{2}{5} + 1\frac{1}{7}$

b. $1\frac{5}{6} \div \frac{11}{12}$

2. Solve the following equations:

a. $5(u - 3) = 2(u + 7)$

b. $9(w - 3) - 2w = 10 - 4(w - 2)$

3. If it takes 96 hours for 10 men to build the foundations for a new school.

How many days would it take 4 men?

4. A house is valued at £315,600.

After renovating their garage to create another room in the house, the value of the house to £327,430

Express the profit as a % of the original value, giving your answer correct to 2 significant figures.

5. The following data represents the numbers of miles run in a week by different members of a training group:

27, 24, 32, 19, 30, 38, 38, 24, 38, 29, 33, 35,
16, 11, 38, 29, 22, 30, 38, 27, 22, 18, 14, 32

a. Display the information in an ordered stem and leaf diagram.

b. Hence find

- Range
- Median



6. Ross is a keen golfer. From the tee he hits the golf ball 165m straight ahead of him (due north).

He then strikes the ball due west at a distance of 98m.

Calculate the closest distance that the golf ball is from the tee.

7. A semi-circle has an area of 278m^2 .

- a. Calculate the radius of this circle.
- b. Hence, calculate the perimeter of the semi-circle.

