

## Estimation and Approximation

Work out an estimate by rounding each number to 1 significant figure.

(a)  $39.3 + 43.2$     (b)  $213 - 108$

(c)  $\frac{876}{29}$     (d)  $\frac{53-11.2}{4.97-1.1}$

(e)  $\frac{4.9 \times 8.2}{3.91}$     (f)  $\frac{4.05}{2.1^2}$

(a) 80    (b) 100

(c) 30    (d) 10

(e) 10    (f) 1

Work out an estimate by rounding each number to 1 significant figure.

(a)  $2110 - 893$     (b)  $4.6109 + 3.401$

(c)  $\frac{15.2+84.7}{3.97}$     (d)  $\frac{8.49}{1.7}$

(e)  $\frac{9.03 \times 6.2}{2.5^2}$     (f)  $\frac{5.02^3}{4.865}$

(a) 1100    (b) 8

(c) 25    (d) 4

(e) 6    (f) 25

1 litre of paint can cover approximately  $11 \text{ m}^2$  of wall. Frank wants to paint two walls each of which are  $2.15 \text{ m}$  high and  $6.89 \text{ m}$  wide. Estimate how many 1 litre tins Frank will need.

$$\text{Area} = 2 \times 7 \times 2 = 28 \text{ m}^2$$
$$\Rightarrow 30 \quad \frac{30}{10} = 3 \text{ cans}$$

Amir chooses two numbers from the list.

44.37    44.44    44.48    44.53

44.55    44.63    44.67    44.71

When he rounds the two numbers to 1 decimal place, they are equal.

When he rounds the two numbers to 2 significant figures, they are not equal.

Which two numbers did Amir choose?

44.48  
& 44.53