7   (a) Seven factory workers and their manager earn these weekly wages:

£294, £245, £300, £288, £300, £259, £290 and £850

What is the **median** weekly wage?

middle but you must put in order

245   259   288 290 294   300   300   850

both in middle

Answer £ ___2.92___ [2]

(b) The manager's weekly wage is increased to £900 from £850

Which of these is not affected by the change?

~~range~~   median   mean   mode

Answer ___Median___ and ___Mode___ [1]

Range = Biggest − Smallest Mean uses all the
900   values

14   John has a telephone with the following costs.

each month

Line rental: £18.99 per month
Call charge: 5.8p per minute

each minute

Last month John made calls lasting 385 minutes.

Work out his telephone bill for last month.
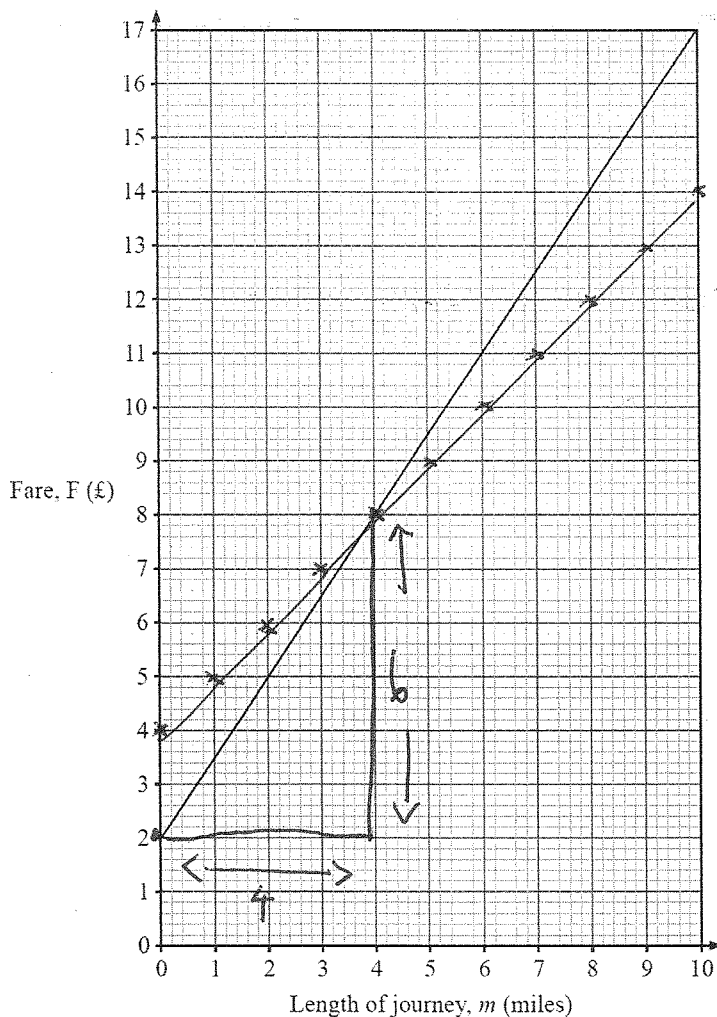
Calls
385 × 5·8 pence
2233 pence
£22·33

18·99
22·33
41·32

Does This seem sensible for a telephone bill?

Answer £ ___41·32___ [3]

25 The graph shows the fare, F (£), for a taxi journey of *m* miles with Trusty Taxis.

Fare, F (£)

Length of journey, *m* (miles)

$$\text{Gradient} = \frac{\text{rise}}{\text{run}}$$

$$= \frac{6}{4}$$

(a) Calculate the gradient of the straight line.

Trusty Taxis

0 miles = £2·00

1 mile = £3·50

2 miles = £5·00

Draw a triangle

$$m = \frac{6}{4} = 1·5$$

Answer **1·5** [2]

(b) Give a real life meaning to the value you found in part **(a)**.

Answer **Each mile costs £1·50** [1]

(c) Classy Cabs charge a minimum fare of £4 plus £1 for each mile travelled.

Draw a graph for the cost of a taxi journey with Classy Cabs on the same grid as Trusty Taxis. [1]

Classy Cabs

0 miles = £4

1 mile = £5

2 miles = £6

3 miles = £7

(d) Use your graphs to work out the length of the journey that will cost the same with both companies.

Answer **8 miles** miles [1]