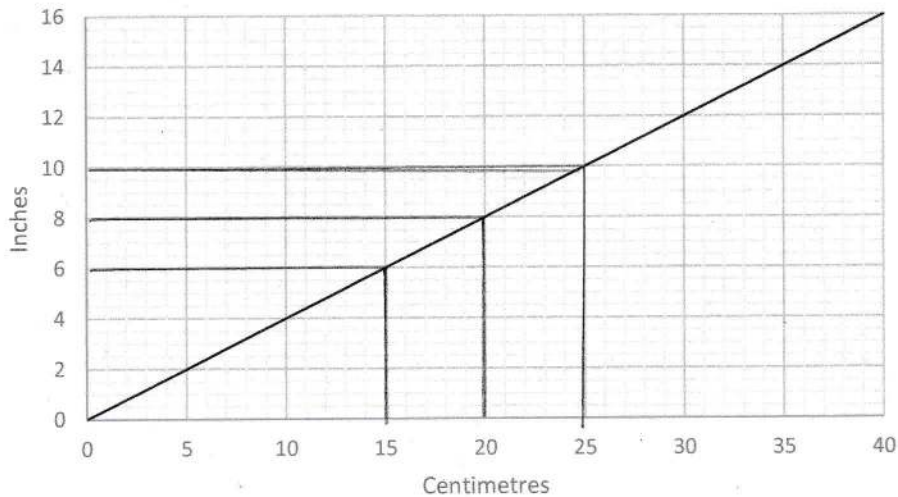


## CONVERSION GRAPHS - PRACTICE QUESTIONS



1.  
The conversion graph below converts between centimetres and inches.



(a) Convert 25 centimetres into inches.

10 inches

(b) Convert 6 inches into centimetres.

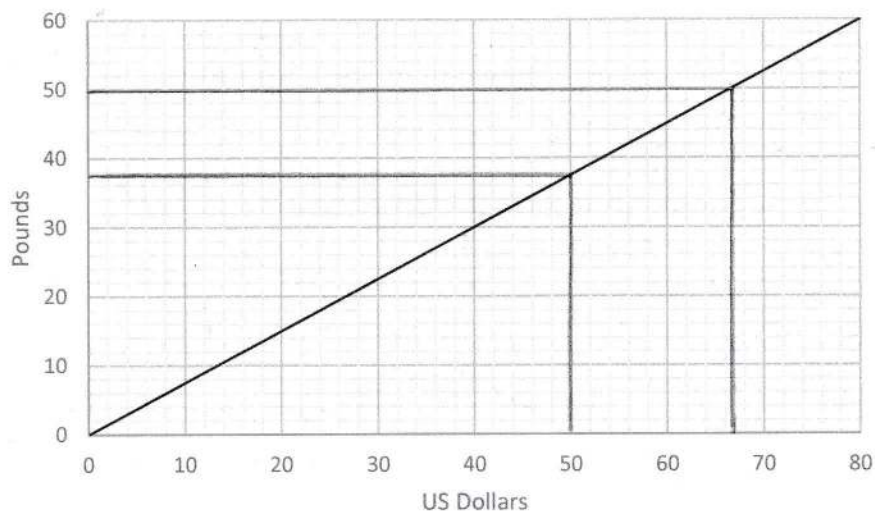
15 centimetres

(c) Convert 60 centimetres into inches.

$\times 3 \left\{ \begin{array}{l} 20 \text{ cm} = 8 \text{ inches} \\ 60 \text{ cm} = 24 \text{ inches} \end{array} \right. \times 3$ 
24 inches

2.

The conversion graph below converts between US dollars and British pounds.



(a) Convert £50 into US dollars.

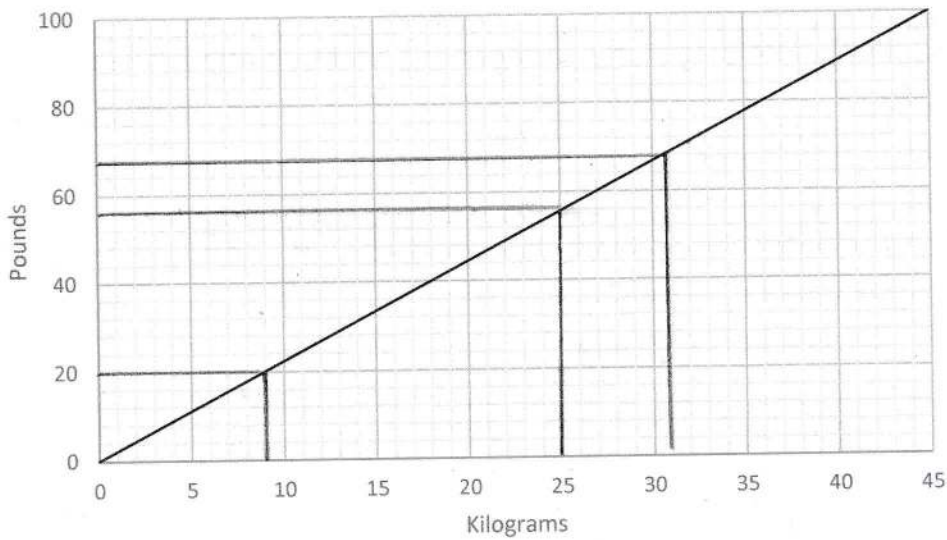
\$67

(b) Convert 100 US dollars into pounds.

$\times 2 \left\{ \begin{array}{l} \$50 = \text{£}38 \\ \$100 = \text{£}76 \end{array} \right. \times 2$ 
£76

3.

The conversion graph below converts between kilograms and pounds.



(a) Convert 64 pounds into kilograms.

31 kilograms

(b) Convert 75 kilograms into pounds.

25 kg = 56 pounds  $\times 3 = 168$  pounds

(c) Shaun is planning to travel on a plane.

If his hand luggage is above 10 kilograms, he has to pay an additional fee.

Shaun weighs his hand luggage and finds that it weighs 20 pounds.

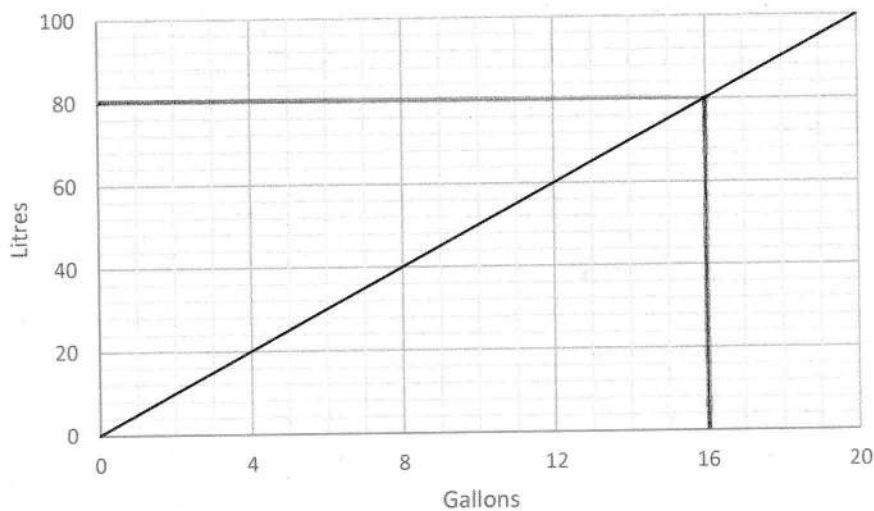
Does Shaun have to pay the additional fee? Show all your working.

20 pounds = 9 kg

No, Shaun does not need to pay the additional fee.

4.

The conversion graph below converts between gallons and litres.



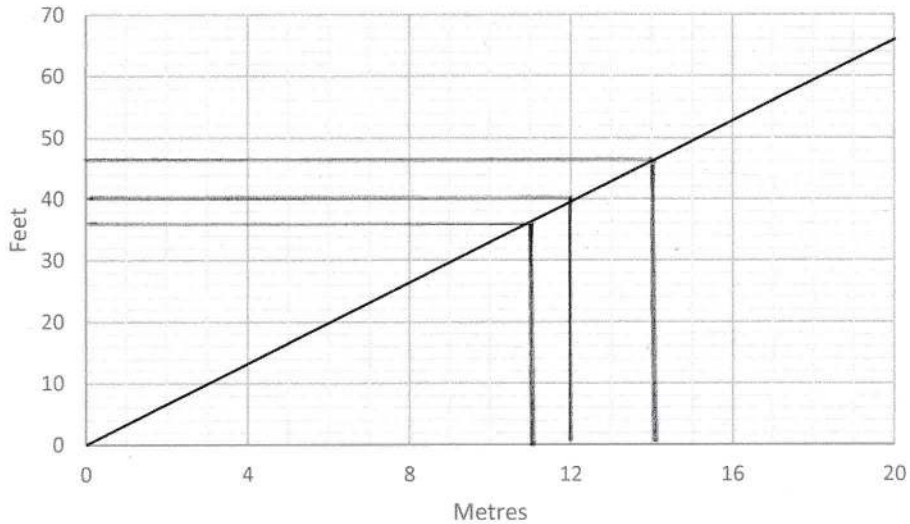
Convert 32 gallons into litres.

$\times 2$  16 gallons = 80 litres  $\rightarrow \times 2$   
32 gallons = 160 litres

160 litres

5.

The conversion graph below converts between metres and feet.



(a) Convert 14 metres into feet.

46 feet

(b) Convert 80 feet into metres.

$$40 \text{ ft} = 12 \text{ m} \times 2 = \underline{24 \text{ m}}$$

(c) Maria's house is 11 metres tall.

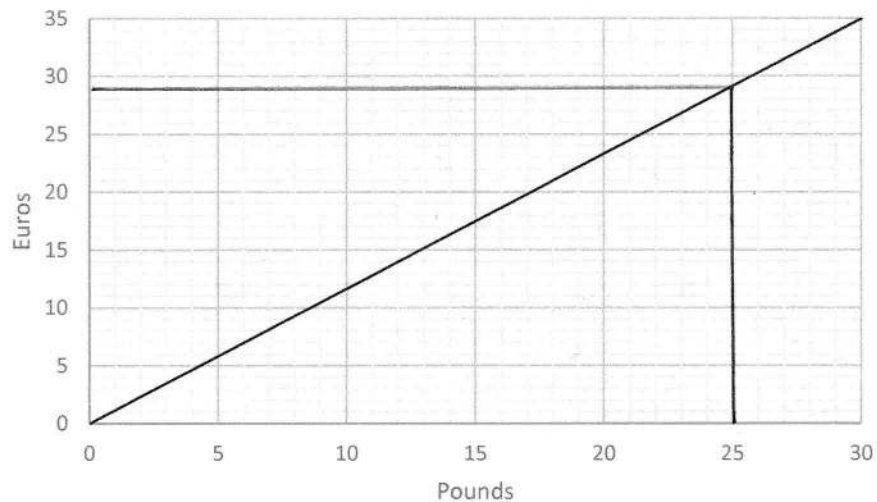
Claire's house is 38 feet tall.

Who's house is taller?

11 m = 36 ft      Claire's house is taller.

6.

The conversion graph below converts between Euros and British Pounds.



Tom has 60 Euros.

Sam has £50.

Who has the most money?

$$\begin{array}{l} \times 2 \rightarrow \pounds 25 = 29 \text{ EUROS} \\ \pounds 50 = 58 \text{ EUROS} \leftarrow \times 2 \end{array}$$

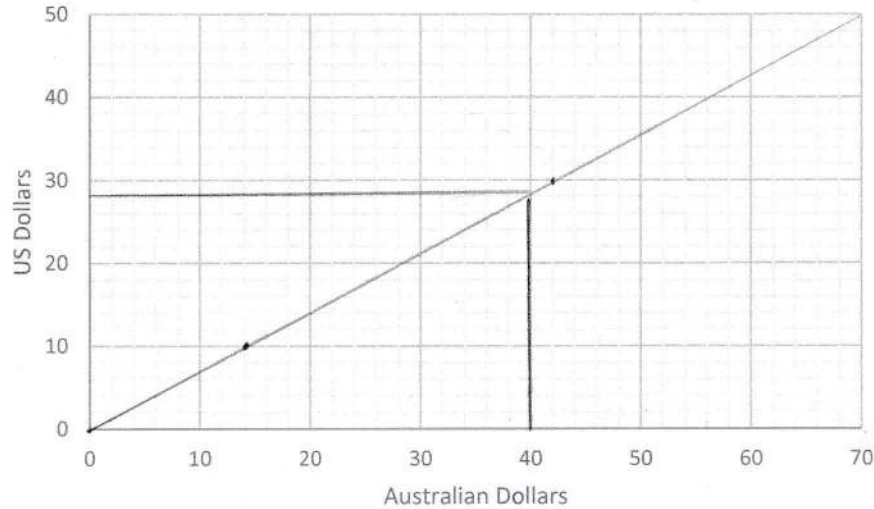
Tom has the most money.

7.

The table below shows the value of amounts of money in US and Australian dollars.

<b>US dollars</b>	0	10	30	50
<b>Australian dollars</b>	0	14	42	70

(a) Use the values in the table to plot a conversion graph.

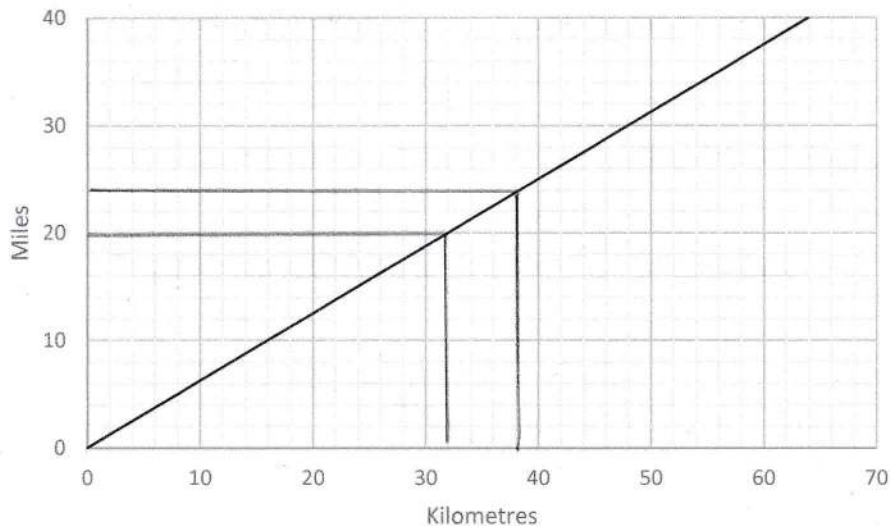


(b) Use your conversion graph to convert 120 Australian dollars into US dollars.

$$40 \text{ Aus} = 28 \text{ US} \quad \times 3 = \$84$$

8.

The conversion graph below converts between miles and kilometres.



(a) Convert 24 miles into kilometres.

$$38 \text{ km}$$

(b) Randy lives 100 miles from Heathrow airport.

Oliver lives 150 kilometres from Heathrow airport.

Who lives nearer to Heathrow airport – Randy or Oliver?

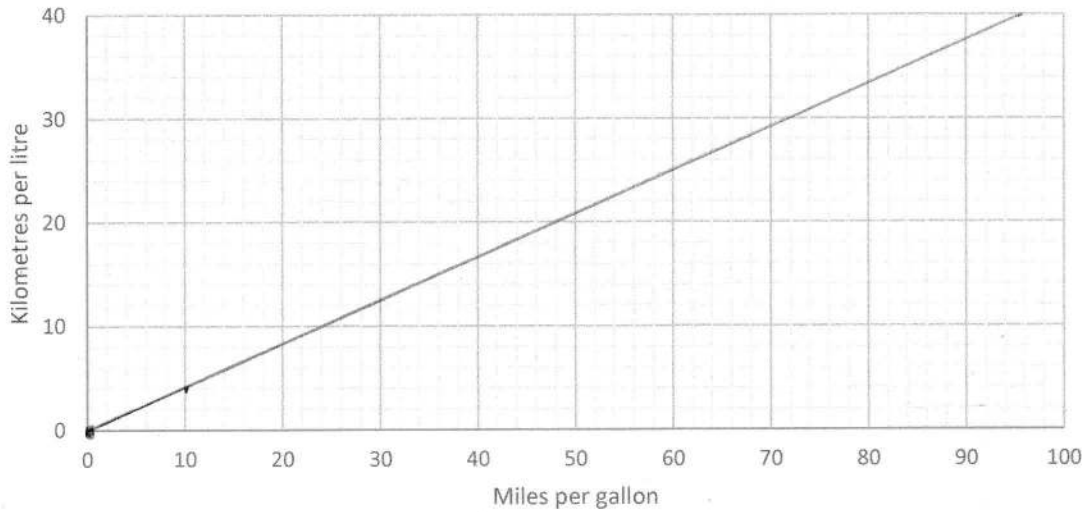
$$\begin{array}{l} \times 5 \rightarrow 20 \text{ miles} = 32 \text{ km} \\ \times 5 \rightarrow 100 \text{ miles} = 160 \text{ km} \end{array}$$

Oliver lives nearer.

9.

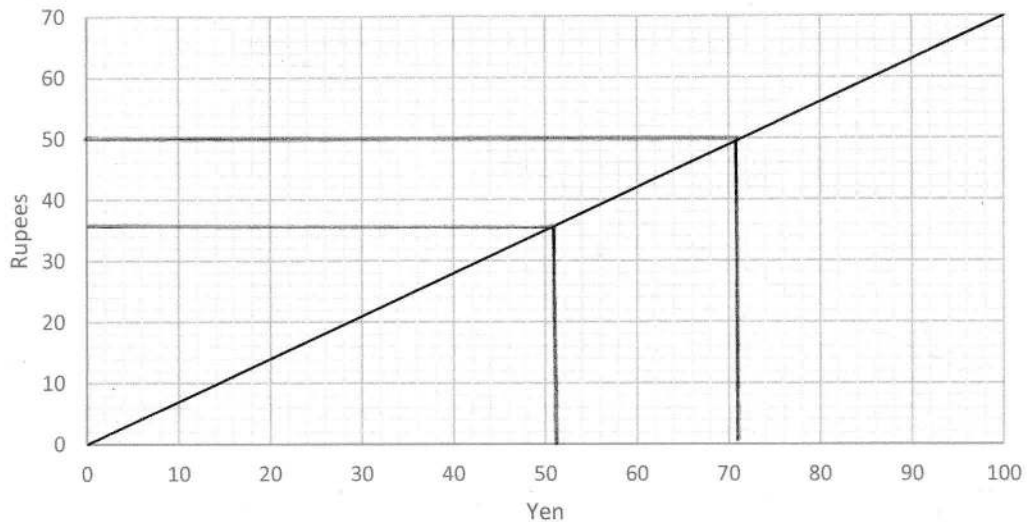
4 kilometres per litre is the same as 10 miles per gallon.

Use this information to plot a conversion graph.



10.

The conversion graph below converts between Chinese Yen and Indian Rupees.



Sanjay is on holiday in China.

He has 500 Rupees and 1000 Yen.

His hotel bill is 1200 Yen.

After paying the hotel bill, how many Rupees does Sanjay have left?

$$\begin{aligned} & \times 10 \quad 50 \text{ Rupees} = 71 \text{ Yen} \quad \times 10 \\ & \rightarrow 500 \text{ Rupees} = 710 \text{ Yen} \end{aligned}$$

$$710 + 1000 = 1710 \text{ Yen}$$

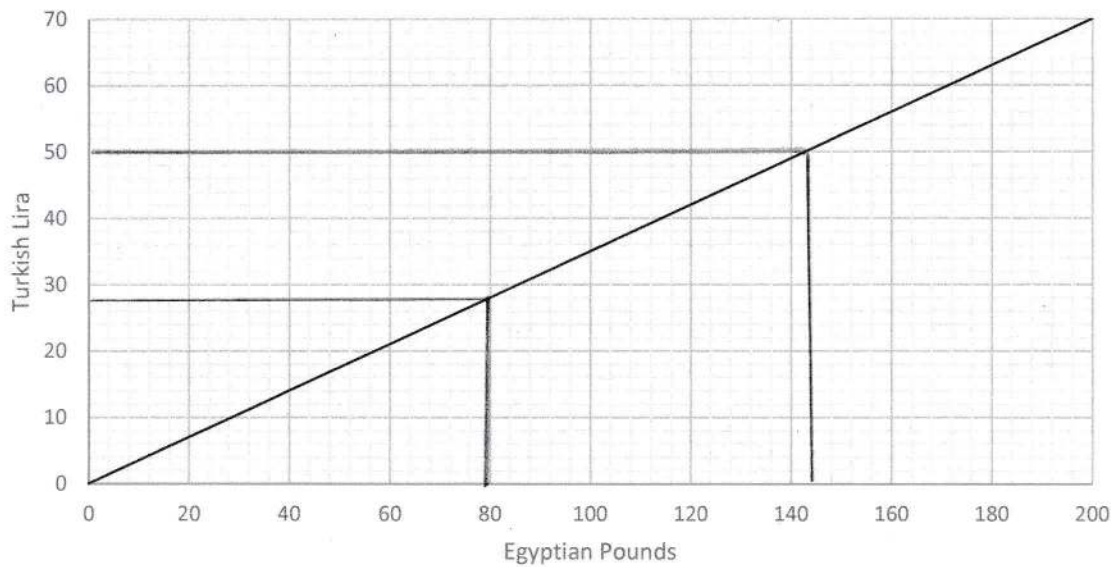
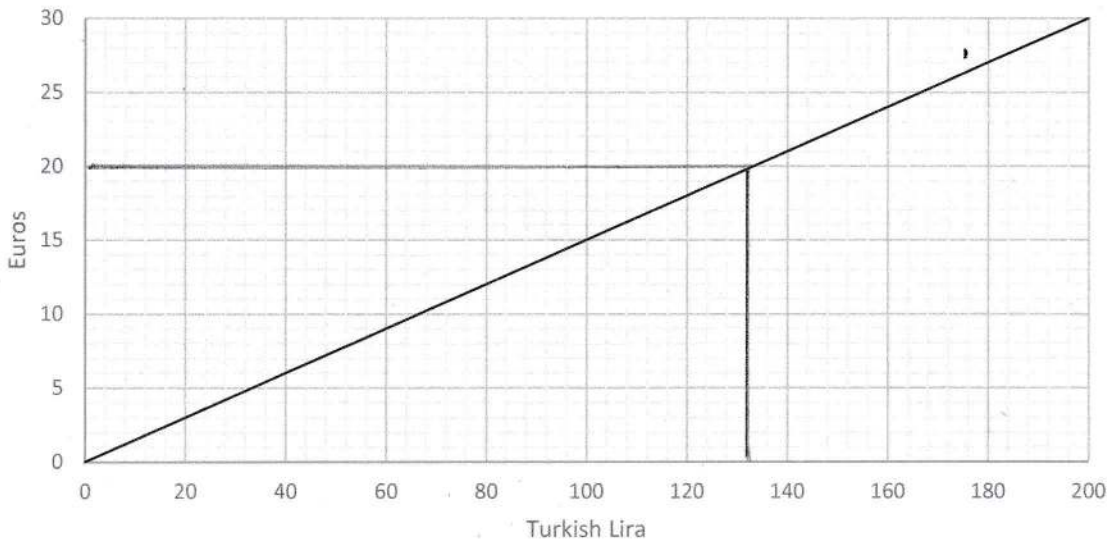
$$1710 - 1200 = 510 \text{ Yen}$$

$$\begin{aligned} & \times 10 \quad 51 \text{ Yen} = 36 \text{ Rupees} \quad \times 10 \\ & \rightarrow 510 \text{ Yen} = 360 \text{ Rupees} \end{aligned}$$

360 Rupees

11.

The two conversion graphs below can be used to convert between currencies.



Use the graphs to convert 80 Euros into Egyptian Pounds.

$$\begin{array}{l} \times 4 \left\{ \begin{array}{l} 20 \text{ Euros} = 132 \text{ Lira} \\ 80 \text{ Euros} = 528 \text{ Lira} \end{array} \right. \times 4 \end{array}$$

$$\begin{array}{l} \times 10 \left\{ \begin{array}{l} 50 \text{ Lira} = 144 \text{ Pounds} \\ 500 \text{ Lira} = 1440 \text{ Pounds} \end{array} \right. \times 10 \end{array}$$

$$28 \text{ Lira} = 80 \text{ Pounds}$$

$$1440 + 80 = \underline{\underline{1,520 \text{ Egyptian Pounds}}}$$