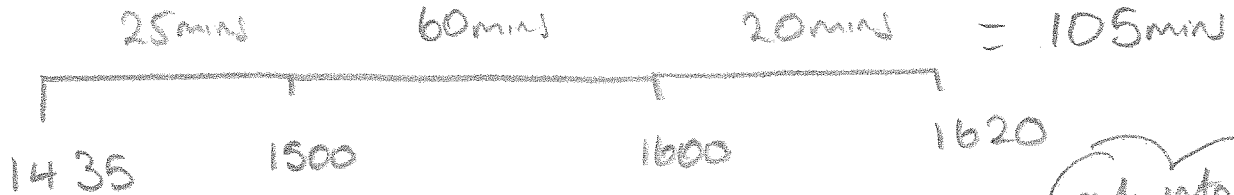


M8 = 14 days to go!

4 A train leaves at 1435 and arrives at the next station at 1620 on the same day.

It covers a distance of 210 miles.

Work out the average speed of the train in km/hr.



$$T = 1 \text{ hour } 45 \text{ mins} \rightarrow 1 \frac{45}{60}$$

put into calc like this

$$D = 210 \text{ miles} \times 1.6 \rightarrow 336 \text{ km}$$

1 mile = 1.6 km

$$S = \frac{D}{T} = \frac{336}{1 \frac{45}{60}} = 192 \text{ km/hr}$$

Answer 192 km/hr [5]

A menu in a restaurant prices the meals as follows:

2 courses	£16
3 courses	£21

starters
 ↓
 5 × 8 = 40 choices

The menu offers 5 starters, 8 mains and 4 desserts.
 John wants a 2 course meal which includes a main.

desserts → 4 × 8 ← main = 32 choices
 40 + 32 = 72

How many choices does John have?

Answer 72 [3]

10

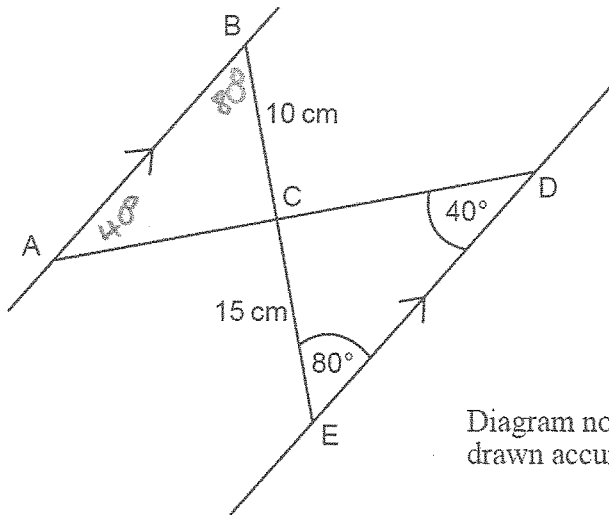
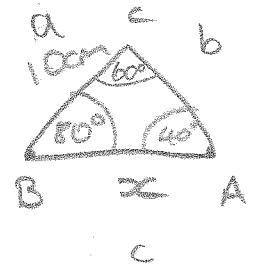
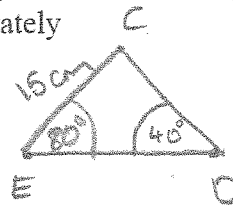


Diagram not drawn accurately

Similar because of parallel lines.



In the diagram above, CE = 15 cm and BC = 10 cm

Calculate the length of AB.

$$\frac{x}{\sin 60^\circ} = \frac{10}{\sin 40^\circ}$$

$$x = \frac{10}{\sin 40^\circ} \times \sin 60^\circ$$

Always draw out to help!

Answer 13.47 cm [4]