

30th January



Corbettmaths

A barrel weighs 400kg to the nearest 10kg.

Max 405kg

A lorry can hold 4 tonnes to the nearest 100kg.

min 3950kg

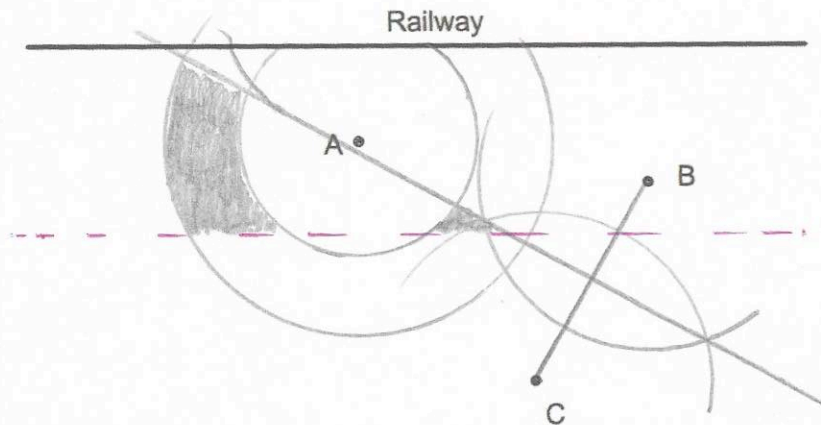
How many barrels can be safely transported?

$$3950 \div 405 = 9.75\dots$$

9 barrels

1cm = 200m

Railway



The phone box is less than 500m from the railway track.

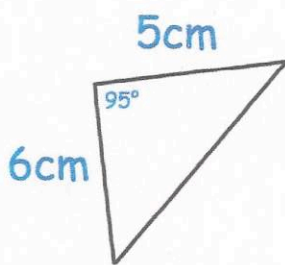
2.5cm

The phone box is between 300m and 500m from house A.

1.5cm & 2.5cm

The phone box is closer to house C than house B.

Shade the region on the map where the phone box could be located.



$$\frac{1}{2} ab \sin C$$

Calculate the area.

$$\frac{1}{2} \times 5 \times 6 \times \sin 95$$

$$14.94 \text{ cm}^2$$

The point A is (5, -2) and the point B is (11, 1).

$$\text{Gradient } AB = \frac{\text{rise}}{\text{run}} = \frac{3}{6} = \frac{1}{2}$$

Find the equation of the line perpendicular to AB passing through the origin.

$$y = -2x$$