

30th September



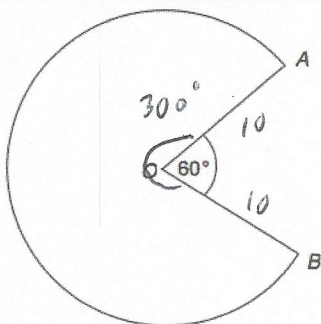
Corbettmaths

Work out the equation of the line passing through A (0, 1) and B (2, 4).

$$y = 1.5x + 1$$

Write down the equation of the line perpendicular to AB and passing through (0, 7)

$$y = -\frac{2}{3}x + 7$$

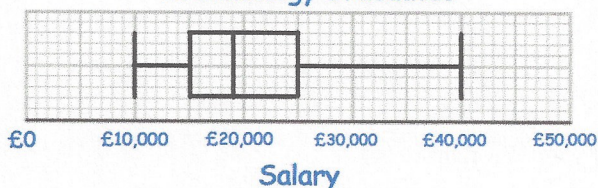


Angle AOB is 60° and OA is 10cm. Find the perimeter of the sector.

$$\frac{300}{360} \times \pi \times 20 + (10 + 10)$$

$$= 72.36 \text{ cm}$$

Archaeology Graduates



Write down the value of the range

$$£30,000$$

Solve

$$\frac{x}{2} + \frac{4x+1}{10} = -8$$

$$\frac{5x}{10} + \frac{4x+1}{10} = -8$$

$$\frac{9x+1}{10} = -8$$

$$9x+1 = -80$$

$$9x = -81$$

$$x = -9$$

Material A has a density of 5.8g/cm<sup>3</sup>.  
Material B has a density of 4.1g/cm<sup>3</sup>.

377g of Material A and 1.64kg of Material B form Material C. 2017g

Work out the density of Material C.

volume of

$$d^m_r \text{ Material A: } \frac{377}{5.8} = 65 \text{ cm}^3$$

$$\text{volume of B: } \frac{1640}{4.1} = 400 \text{ cm}^3$$

$$d = \frac{2017}{465} = 4.3376 \text{ g/cm}^3$$