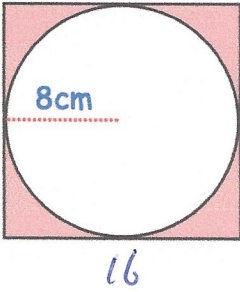


20th October



Corbettmaths

Calculate the shaded area



$$16 \times 16 = 256$$

$$\pi \times 8^2 = 201.0619298$$

$$256 - 201.0619298 = 54.9380702$$

Solve

$$x^2 + 8x + 16 = 0$$

$$(x+4)(x+4) = 0$$

$$x = -4$$

Shop A  
50% extra free  
150ml  
Only £40

Shop B  
Buy one get the second  
HALF PRICE  
Normal price £40  
for 100ml

£60 for 200ml

Two shops sell the same type of perfume. A 100ml bottle of perfume normally costs £40.

Rebecca says that both offers give the same value for money. Is she correct? Show your working.

No

Shop A

$$4000 \div 150 = 26.6 \text{ p per ml}$$

Shop B

$$6000 \div 200 = 30 \text{ p per ml}$$

Shop A is better value

Calculate the size of angle CAB.

$$\cos x = \frac{8}{10.5}$$

$$x = \cos^{-1}\left(\frac{8}{10.5}\right)$$

$$= 40.3676^\circ$$

