

8th August



Corbettmaths

Simplify

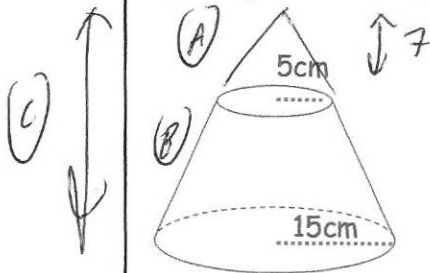
$$(\sqrt{32} + 7\sqrt{2})^2$$

$$(\sqrt{32} + 7\sqrt{2})(\sqrt{32} + 7\sqrt{2})$$

$$32 + 56 + 56 + 98$$

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A frustum is made from cutting a small cone from the top of a larger cone. The larger cone was 21cm tall.



Calculate the surface area of the frustum

$$(C) \quad r = 15 \quad L = 3\sqrt{74}$$

$$\text{Curved SA} = \pi \times 15 \times 3\sqrt{74}$$

$$= 1216.125 \dots \text{cm}^2$$

$$(A) \quad r = 5 \quad L = \sqrt{74}$$

$$= 135.125 \dots \text{cm}^2$$

$$(B) \quad \text{Curved SA} = 1081 \text{cm}^2$$

$$\text{top} = 78.5398 \dots$$

$$\text{bottom} = 706.858 \dots$$

$$1866.398 \text{cm}^2$$

Work out the exact answer of

$$\tan 30^\circ + \tan 60^\circ$$

$$\frac{\sqrt{3}}{3} + \sqrt{3} = \frac{4}{3}\sqrt{3}$$

Factorise

$$6x^2 - 35xy + 49y^2$$

$$(3x - 7y)(2x - 7y)$$