

M8 = 3 days to go!

3 Which of the following is the calculation to increase 2000 by 5%?

$$2000 \times 1.5$$

$$2000 \times 0.5$$

$$2000 \times 1.05$$

$$2000 \times 0.05$$

Circle the correct answer.

[1]

13 A cylinder has a radius of $(5 - \sqrt{2})$ cm and a height of $3\sqrt{2}$ cm.

Show that the volume of the cylinder can be written as $(81\sqrt{2} - 60) \pi \text{ cm}^3$

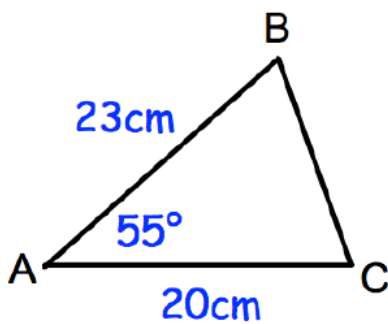
[4]

The time taken, t , for passengers to be checked-in for a flight is inversely proportional to the square of the number of staff, s , working

It takes 30 minutes for passengers to be checked-in when 5 staff are working.

- (a) Find an equation connecting t and s .
- (b) How long would it take to check-in the passengers with 3 staff working?

4.



Calculate the length of BC.

.....cm
(3)