M4 -30 days to go!

5 A child's height increased from 84 cm to 91 cm.

Calculate the percentage increase.

$$\%\ \text{increase} = \frac{\text{increase}}{\text{original}} \times 100$$

$$= \frac{7}{84} \times 100$$

$$= 0.083\dot{3}$$

Answer $8.\dot{3}$ % [3]

Remember

$$\%\ \text{profit} = \frac{\text{profit}}{\text{original}} \times 100$$

$$\%\ \text{loss} = \frac{\text{loss}}{\text{original}} \times 100$$

Errors! Error = ± ½ unit

15 A train travels 736 km (correct to the nearest km).

The journey takes 4.5 hours (correct to the nearest 0.1 hour).

Work out the minimum possible average speed and the maximum possible average speed in km/h.

736 ± ½ km

735.5 ≤ < 736.5

4.5 ± ½ of 0.1

4.5 ± 0.05

4.45 ≤ < 4.55

There are 4 possible combinations

Minimum speed = mini distance / max time = 735.5 / 4.55

Maximum speed = maxi distance / mini time = 736.5 / 4.45

Answer minimum average speed is 161.65 km/h

maximum average speed is 165.51 km/h [4]