

Let:

$$T(60) = 60^{\circ}\text{C}$$

$$T(100) = 100^{\circ}\text{C}$$

$$T(x) = 0^{\circ}\text{C}$$

$$L(100) = 50 \text{ mm}$$

$$L(60) = 52 \text{ mm}$$

$$L(x) = ?$$

Find how many *mm* on 1°C

$$L(1^{\circ}\text{C}) = \frac{L(100) - L(60)}{T(100) - T(60)} = \frac{50 - 52}{100 - 60} = -\frac{2}{40} = -0.05 \text{ mm}$$

$$L(x) = L(100) - L(1^{\circ}\text{C}) * (T(100) - T(x)) = 50 - (-0.05 * 100) = 55 \text{ mm}$$

Answer: the value of X is: 55 mm