

Solutions

$$\mu = 18 \text{ mins}$$

$$\sigma = 3.8 \text{ mins}$$

$$\bar{x} = 16.5 \text{ mins}$$

$$n = 120$$

Method A (Casio Classwiz)	Method B (standardised)
16.5	$\frac{16.5 - 18}{\frac{3.8}{\sqrt{120}}} = -4.32$

$$\mu = 64.5 \text{ kg}$$

$$\sigma = 12.1 \text{ kg}$$

$$\bar{x} = 68.3 \text{ kg}$$

$$n = 32$$

Method A (Casio Classwiz)	Method B (standardised)
68.3	$\frac{68.3 - 64.5}{\frac{12.1}{\sqrt{32}}} = +1.78$

$$\mu = 330 \text{ ml}$$

$$\sigma = 2.6 \text{ ml}$$

$$\bar{x} = 325 \text{ ml}$$

$$n = 11$$

Method A (Casio Classwiz)	Method B (standardised)
325	$\frac{325 - 330}{\frac{2.6}{\sqrt{11}}} = -6.38$

$$\mu = 580 \text{ cm}$$

$$\sigma^2 = 294.4 \text{ cm}$$

$$\bar{x} = 586 \text{ cm}$$

$$n = 45$$

Method A (Casio Classwiz)	Method B (standardised)
586	$\frac{586 - 580}{\frac{\sqrt{294.4}}{\sqrt{45}}} = +2.35$

$$\mu = 5.95 \text{ ft}$$

$$\sigma^2 = 20.4 \text{ ft}$$

$$\bar{x} = 5.74 \text{ ft}$$

$$n = 30$$

Method A (Casio Classwiz)	Method B (standardised)
5.74	$\frac{5.74 - 5.95}{\frac{\sqrt{20.4}}{\sqrt{30}}} = -0.255$