

HW 112

A2

1. 91, 92, 93, 101, 104, 107, 112, 118

a) mean = 102.25°

median = 102.5°

Q₁ = 92.5°

Q₃ = 109.5°

IQR = 17°

b) $SD = \sqrt{(91-102.25)^2 + (92-102.25)^2 + (93-102.25)^2 + (101-102.25)^2 + (104-102.25)^2 + (107-102.25)^2 + (112-102.25)^2 + (118-102.25)^2}$

SD = 9.91°

2. a) mean = 21.2 kg

median = 20 kg

~~Q₁~~

~~Q₃~~

IQR = 5.8 kg

b) SD = 4.15 kg

3. a) $\frac{1}{2} + 5 + 14 + 8 + 42 = 30$ total

$\frac{6}{30} = 0.2 \rightarrow 20\%$ for 105 cm

$\frac{28}{30} = 0.93 \rightarrow 93\%$ for 115 cm

b) $1 + 2 + 8 + 18 + 10 + 1 = 40$

$\frac{11}{40} = 0.275 \rightarrow 27.5\%$ for 105 cm

$\frac{39}{40} = 0.975 \rightarrow 97.5\%$ for 115 cm

P 628

1. $A = \frac{1}{2}bh$

$A = \frac{1}{2}(4)(h)$

$1 = 2h$

$\frac{1}{2} = h \rightarrow$ each square $\frac{1}{8}$

B

$1 = \frac{1}{2}(6)(h)$

$1 = 3h$

$\frac{1}{3} = h \rightarrow$ each square $\frac{1}{12}$

C

$1 = bh$

$1 = 5(h)$

$\frac{1}{5} = h \rightarrow$ each square $\frac{1}{10}$

D

$1 = \frac{1}{2}(2)h + 1h + 2h$

$1 = 1h + 1h + 2h$

$1 = 4h$

$\frac{1}{4} = h \rightarrow$ each square $\frac{1}{12}$

2. **A** $A = \frac{1}{2}(3)(\frac{3}{2}) = \frac{9}{4}$

B $A = \frac{1}{2}(3)(\frac{1}{4}) = \frac{3}{8}$

C $A = 3(\frac{2}{10}) = \frac{3}{5}$

D $A = \frac{1}{2}(2)(\frac{2}{12}) + 1(\frac{2}{12}) = \frac{1}{3}$

3. answers will vary