Revision Homework 2

(1.) $3\frac{1}{2} \times 2\frac{1}{3}$

$= \frac{7}{2} \times \frac{7}{3}$

$= \frac{49}{6}$

$= 8\frac{1}{6}$

(2.) a) $10\% \Rightarrow 80 \div 10$

$= 8$

$5\% \Rightarrow 8 \div 2$

$= 4$

$2\frac{1}{2}\% \Rightarrow 4 \div 2$

$= 2$

$27\frac{1}{2}\% \Rightarrow 2 \times 10\% + 5\% + 2\frac{1}{2}\%$

$= 16 + 4 + 2$

$= £22$

b) $1\% \Rightarrow 24 \div 100$

$= £0.24$

$= 24p$

$7\% \Rightarrow 7 \times 24p$

$= 168p$

$= £1.68$

(3.) Total age of 5 girls = 5×9

$= 45$ yrs.

Total age of 6 girls = $6 \times 9\frac{1}{2}$

$= 57$ yrs.

New girls age = $57 - 45$

$= 12$ yrs

(4.) a) $\frac{5}{9}$ b) $\frac{4}{9} \times 100\%$

$= 0.\dot{4} \times 100\%$

$= 44.4\%$ (to 3 sf)

$$9 \overline{)4.0^{4}0^{4}0^{4}0} \quad 0.4444$$

(5.) range = $6 - (-3)$

$= 6 + 3$

$= 9°C$

mode = $1°C$

median = $1°C$ $\Rightarrow -3, -2, 0, 1, 1, 5, 6$

mean = $\frac{-3 + (-2) + 0 + 1 + 1 + 5 + 6}{7}$

$= \frac{7}{7}$

$= 1°C$

(6.) Cost = 6×12

$= £72$

No. of apples = $6 \times 80 = 480$

No. of packs = $480 \div 5$

$= 96$

Selling price = 96×1.20

$= £115.20$

$$\text{Profit} = 115.20 - 72$$

$$= 43.20$$

$$\%\ \text{Profit} = \frac{43.20}{72} \times 100\%$$

$$= 60\%$$

(7.) The maximum volume is to use all of red.

	R : B : W
	2 : 3 : 1
$\times 1.5$	(3) : 4.5 : 1.5

$$3 + 4.5 + 1.5$$

$$= 9 \text{ Litres.}$$