5.3 Writing Proportions

One way to write a proportion is to use a table

	Last m	This Month
Purchase Cost	2 rt / 6 $	3 rt / X $

$= \frac{2}{6} = \frac{3}{x}$

1 [ex] test worth 50 points; test score of 78%

X	78%
50	100

$= \frac{X}{50} = \frac{78}{100}$

2 [Ex] Test worth 150 points; test score of 96%

X	96
150	100

$= \frac{X}{150} = \frac{96}{100}$

Use a table

	may	June
Winners	n	34
Entries	85	170

$\frac{n \text{ winners}}{85 \text{ entries}} = \frac{34 \text{ winners}}{170 \text{ entries}}$

Solve the proportion

1) $\frac{1}{3}{}^{\times 4}_{\times 4} = \frac{X}{12}$ $\boxed{x=4}$

2) $\frac{5}{9}{}^{\times 5}_{\times 5} = \frac{25}{y}$ $\boxed{y=45}$

3) $\frac{26}{Z}{}^{-2}_{2} \overset{\times 13}{=}{}_{\times 22}$ $\boxed{z=44}$

4) $\frac{b}{30}{}^{\times 20}_{\times 20} = \frac{2.6}{1.5}$ $b= 52$

(5)