



**Solving Equations
Practice**

Literal Equations
2, 6, 9, 12, 13, 18




2. $X = 180 - Y$; for Y


$$\begin{array}{r} -180 \quad -180 \\ \hline X - 180 = +Y \\ -1 \qquad +1 \\ \hline -X + 180 = Y \end{array}$$


6. $r \cdot C = \frac{mv^2}{r}$; for r


$$\frac{r \cancel{r}}{r} = \frac{mv^2}{\cancel{r}}$$

$$r = \frac{mv^2}{C}$$


9. $3by - 2 = 2by + 1$; for y

$$\begin{array}{r} +2 \qquad +2 \\ \hline 3by = 2by + 3 \\ -2by \quad -2by \\ \hline by = 3 \\ \frac{by}{b} = \frac{3}{b} \\ y = \frac{3}{b} \end{array}$$


12. $A = P + Prt$; for t


$$\begin{array}{r} -P \quad -P \\ \hline A - P = Prt \\ \frac{A - P}{Pr} = \frac{Prt}{Pr} \\ \frac{A - P}{Pr} = t \end{array}$$


13. $a = \frac{v_2 - v_1}{t}$; for v_1

$$at = v_2 - v_1$$

$$-v_2 \quad -v_2$$

$$* -1 \rightarrow at - v_2 = -v_1 \quad \leftarrow * -1$$

$$-at + v_2 = v_1$$


18. $(1-r)S = \frac{a}{1-r}^{(1-r)}$; for r

$(1-r)S = \frac{a}{S}$

$1-r = \frac{a}{S}$

$-r = \frac{a}{S} - 1$

$r = -\frac{a}{S} + 1$

$r = 1 - \frac{a}{S}$

$S - rS = a$

$+rS = \frac{a-S}{-S}$

$r = \frac{a-S}{-S}$

$\frac{a-S}{-S} = -\frac{a}{S} + 1$