Lesson 1-2 Literal Equations 2

- I can solve equations for a specific variable

Solve the Following:

1. \( T = m - n \) Solve for \( n \)
   \[
   n + T = m
   \]
   \[
   n = m - T
   \]

2. \( V = lwh \) Solve for \( w \)
   \[
   w = \frac{V}{lh}
   \]

3. \( ax + by = 2c \) Solve for \( y \)
   \[
   by = 2c - ax
   \]
   \[
   y = \frac{2c - ax}{b}
   \]

4. \( A = p(1 + rt) \) Solve for \( t \)
   \[
   \frac{A}{p} - 1 = rt
   \]
   \[
   t = \frac{A}{p} - \frac{1}{r}
   \]

5. \( C = \frac{5}{9}(F - 32) \) Solve for \( F \)
   \[
   \frac{9}{5}C = F - 32
   \]
   \[
   \frac{9}{5}C + 32 = F
   \]

6. \( B = \frac{703w}{h^2} \) Solve for \( w \)
   \[
   Bh^2 = 703w
   \]
   \[
   \frac{Bh^2}{703} = w
   \]

7. \( F = \frac{g_m m_2}{d^2} \) Solve for \( g \)
   \[
   F d^2 = g_m m_2
   \]
   \[
   \frac{F d^2}{m_1 m_2} = g
   \]

8. \( 3x - 4y = 7 \) Solve for \( x \)
   \[
   3x = 7 + 4y
   \]
   \[
   x = \frac{7 + 4y}{3}
   \]
9. \( 15y + 1 = x \) Solve for \( y \).

\[
15y = x - 1 \\
y = \frac{x - 1}{15}
\]

10. \( e^x - 2y = 3 \) Solve for \( x \)

\[
e^x = 3 + 2y \\
x = \frac{3 + 2y}{e}
\]

11. \( \frac{3}{5}y + a = b \) Solve for \( y \)

\[
\frac{3}{5}y = b - a \\
y = \frac{5}{3}(b - a)
\]

12. \( y = mx + b \) Solve for \( m \)

\[
y - b = mx \\
\frac{y - b}{x} = m
\]

13. \( \left(\frac{by + 2}{3} = c\right) \) Solve for \( y \)

\[
by + 2 = 3c \\
by = 3c - 2 \\
y = \frac{3c - 2}{b}
\]

14. \( R(P = \frac{E^2}{R}) \) Solve for \( R \)

\[
RP = E^2 \\
R = \frac{E^2}{P}
\]

15. \( km + 5x = 6y \) Solve for \( m \)

\[
km = 6y - 5x \\
m = \frac{6y - 5x}{k}
\]

16. \( p(t + 1) = -2 \) Solve for \( t \)

\[
t + 1 = -\frac{2}{p} \\
t = -\frac{2}{p} - 1
\]

17. \( \left(\frac{3ax - n}{5} = -4\right) \) Solve for \( x \)

\[
3ax - n = -20 \\
3ax = -20 + n \\
x = \frac{-20 + n}{3a}
\]

18. \( h = vt - 16t^2 \) Solve for \( v \)

\[
h + 16t^2 = vt \\
\frac{h + 16t^2}{t} = v \\
\frac{h + 16t}{t} = v
\]