After completing the worksheet, check your solutions against the solutions given on my website.

**Algebra Worksheet 1**

Solve the following equations for the unknown value. Remember the golden rule of algebra: Do the same thing to both sides of the equation! Please show your steps and align your equals signs vertically. Your solution should have a slight V shape to it. Proceed in alphabetical order.

a) \( a + 5 = 8 \)
   \[ a = 3 \]

b) \( b + 3 = 5 \)


c) \( c + 6 = -4 \)

d) \( d - 5 = 3 \)

\[ e \]

\( 6 - e = -1 \)
   \[ -e = -7 \]
   \[ e = 7 \]

\[ f \]

\( 7 + f = 4 \)

\[ g \]

\( 9 - g = -7 \)

\[ h \]

\( 2h + 3 = -5 \)

\[ i \]

\( 8 - 3i = 9 \)

\[ j \]

\( 10 + 5j = -5 \)

\[ k \]

\( 6k + 3 = -9 \)

\[ l \]

\( 2l = l + 5 \)
m) \[ 3m = m - 4 \]
\[
\begin{align*}
- m & - m \\
2m &= - 4 \\
\div 2 & \div 2 \\
m &= - 2
\end{align*}
\]

q) \[ 8q + 1 = 6q + 9 \]

u) \[ -4 + 2u = 3u - 8 \]

n) \[ n + 5 = 3n - 4 \]

r) \[ 3r + 6 = 5r - 7 \]

v) \[ 2(v + 3) = 4v + 3 \]

o) \[ o - 6 = 5o + 8 \]

s) \[ 8 - 3s = -3 + 4s \]

w) \[ -2(v + 1) = 3v + 5 \]

p) \[ 10 - 2p = 3 + 2p \]

\[ 4 + 2t = 10 - 3t \]

x) \[ 4(3 - x) = 3 + x \]

Now check your answers on my website! They are posted under the November 22nd heading.
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