<u>The goal:</u> what does the unknown variable equal? → letter $y = \underline{\quad}.$ $x = \underline{\quad}.$

(1) <u>Solve by Inspection:</u> $-2w = 6$ *multiplying*

Ask yourself: "What number multiplied by -2 equals 6?   OR "What number results from dividing 6 by -2?"

$$-2 \times \underline{-3} = 6 \qquad W = -3$$

Try These: Solve by Inspection: → *dividing*

$3x = -12$

$X = -4$

$\dfrac{r}{-2} = -7$

$\dfrac{14}{-2} = \dfrac{-7}{}$ $\boxed{r = 14}$

$-3t = -36$

$t = 12$

$\dfrac{n}{3} = -7$

$n = -21$

---

(2) Isolate the variable by using the <u>opposite operation:</u> ✳ $+ \quad -$

$\times(-2)\ \dfrac{w}{-2} = 6 \times -2$ The opposite of dividing by -2 is multiplying by -2

$W = 6 \times (-2)$ $\dfrac{-2}{1} \times \dfrac{w}{-2} = \dfrac{-2w}{-2} = W$

$\boxed{W = -12}$

Perform the opposite operation on both sides of the equal sign.   Keep it balanced!!!

Try these by isolating the variable using the opposite operation:

$\dfrac{84}{12} = \dfrac{12d}{12}$

$\boxed{7 = d}$

$\dfrac{-5b}{-5} = \dfrac{-45}{-5}$

$\boxed{b = 9}$

$\dfrac{6f}{6} = \dfrac{-12}{6}$

$\boxed{f = -2}$

$7 \times \dfrac{k}{7} = 6 \times 7$

$\boxed{K = 42}$