Solutions to WS 12.2 - More Solving Two-Step Equations, #1-20 all

**① ** $8 - 4d = 12$
$-8 -8$
$\dfrac{-4d}{-4} = \dfrac{4}{-4}$
$\boxed{d = -1}$

**② ** $-11 - 10f = -41$
$+11 +11$
$\dfrac{-10f}{-10} = \dfrac{-30}{-10}$
$\boxed{f = 3}$

**③ ** $5.3 = -b + 1.8$
$-1.8 -1.8$
$\dfrac{3.5}{-1} = \dfrac{-b}{-1}$
$-3.5 = b \Rightarrow \boxed{b = -3.5}$

**④ ** $9 = 7 - \dfrac{j}{4}$
$-7 -7$
$(-4) \, 2 = \dfrac{-j}{4} \cdot (-4)$
$-8 = j \Rightarrow \boxed{j = -8}$

**⑤ ** $12h - 2.5 = -26.5$
$+2.5 +2.5$
$\dfrac{12h}{12} = \dfrac{-24}{12}$
$\boxed{h = -2}$

**⑥ ** $1 - 4n = 65$
$-1 -1$
$\dfrac{-4n}{-4} = \dfrac{64}{-4}$
$\boxed{n = -16}$

**⑦ ** $\dfrac{b}{4} - 3.2 = 12.3$
$\phantom{\dfrac{b}{4}}+3.2 +3.2$
$(4) \cdot \dfrac{b}{4} = 15.5 \cdot (4)$
$\boxed{b = 62}$

**⑧ ** $12 - f = 22$
$-12 -12$
$\dfrac{-f}{-1} = \dfrac{10}{-1}$
$\boxed{f = -10}$

**⑨ ** $0.5y + 5.2 = -2.8$
$-5.2 -5.2$
$\dfrac{0.5y}{0.5} = \dfrac{-8}{0.5}$
$\boxed{y = -16}$

**⑩ ** $-18 = -4z + 12$
$-12 -12$
$\dfrac{-30}{-4} = \dfrac{-4z}{-4}$
$\dfrac{15}{2} = z \Rightarrow \boxed{z = \dfrac{15}{2}}$
OR
$\boxed{z = 7.5}$

**⑪ ** $-p + 10 = -25$
$-10 -10$
$\dfrac{-p}{-1} = \dfrac{-35}{-1}$
$\boxed{p = 35}$

**⑫ ** $12 = \dfrac{-r}{6} + 3$
$-3 \phantom{=\frac{-r}{6}}-3$
$(-6) \cdot 9 = \dfrac{-r}{6} \cdot (-6)$
$-54 = r \Rightarrow \boxed{r = -54}$

⑬ $8 - \frac{h}{3} = -10$

$-8 \qquad -8$

$(-3) \cdot -\frac{h}{3} = -18 \cdot (-3)$

$\boxed{h = 54}$

⑭ $0.75q + 2.5 = -6.5$

$-2.5 \quad -2.5$

$\frac{0.75q}{0.75} = \frac{-9}{0.75}$

$\boxed{q = -12}$

⑮ $15 = -7 - \frac{z}{6}$

$+7 \quad +7$

$(-6) \cdot 22 = -\frac{z}{6} \cdot (-6)$

$-132 = z \Rightarrow \boxed{z = -132}$

⑯ $-1.25q - 12.5 = 8.35$

$+12.5 \quad +12.5$

$\frac{-1.25q}{-1.25} = \frac{20.85}{-1.25}$

$\boxed{q = -16.68}$

⑰ $-\frac{K}{3} - \frac{1}{5} = \frac{4}{5}$

$\phantom{-\frac{K}{3}}+\frac{1}{5} \quad +\frac{1}{5}$

$(-3) \cdot -\frac{K}{3} = 1 \cdot (-3)$

$\boxed{K = -3}$

⑱ $9 = 2.1 - 0.25m$

$-2.1 \quad -2.1$

$\frac{6.9}{-0.25} = \frac{-0.25m}{-0.25}$

$-27.6 = m \Rightarrow \boxed{m = -27.6}$

⑲ $9 - \frac{b}{5} = 12$

$-9 \phantom{\frac{b}{5}} -9$

$(-5) \cdot -\frac{b}{5} = 3 \cdot (-5)$

$\boxed{b = -15}$

⑳ $11 - 2q = 5$

$-11 \qquad -11$

$\frac{-2q}{-2} = \frac{-6}{-2}$

$\boxed{q = 3}$