Solving equations with rational coefficients 10/3/17

Ex 1: $\frac{3}{4}c = 18$ ← coefficient

$\frac{\frac{3}{4}c}{\frac{3}{4}} = \frac{18}{\frac{3}{4}}$ $= \frac{18}{1} \cdot \frac{4}{3}$ $\frac{24}{1}$

$\boxed{c = 24}$

OR

$\left(\frac{4}{3}\right)\frac{3}{4}c = 18\left(\frac{4}{3}\right)$

$\frac{18}{1} \cdot \frac{4}{3}$ 24 check!

$\boxed{c = 24}$ $\frac{3}{4} \times \frac{24}{1}$ $\frac{18}{1}$ ✓

Ex 2: $-24 = -\frac{6}{7}p$

$\left(-\frac{7}{6}\right) -24 = -\frac{6}{7}\left(-\frac{7}{6}\right)$

$\frac{7}{6} \cdot \frac{24}{1}$ $\boxed{28 = p}$

Ex 3: $-9\frac{5}{8}w = 108$

$-9\frac{5}{8} = \frac{-77}{8}$ $\frac{-77}{8}$ $\frac{108}{1} \cdot \frac{8}{77}$

$108 \times 8 = 864$ $w = \frac{864}{77}$

$77 \overline{)864}$ = 11 R 17

$\boxed{w = -11\frac{17}{77}}$

Ex 4: $-1.4m = 2.1$

$\div -1.4$ $\div -1.4$

$\boxed{m = -1.5}$

$14 \overline{)21}$ = 1, -14, 07