

Multiplicative Inverse

Multiplicative Inverse: The number that you multiply by to get a product of 1. "Reciprocal"

1. $\frac{3}{5} * \boxed{\frac{5}{3}} = 1$

2. $1 * \boxed{1} = 1$

3. $\frac{1}{5} * \boxed{5} = 1$

Using the Multiplicative Inverse to Solve Equations

1. $\frac{4}{7}x = -12$
 Multiply
 $(\frac{7}{4})\frac{4}{7}x = -\frac{12}{1}(\frac{7}{4})$
 $x = -21$

2. $\frac{5}{6}m = 20$

$(\frac{6}{5})\frac{5}{6}m = \frac{20}{1}(\frac{6}{5})$
 $m = 24$

3. $\frac{1}{8}x + 10 = 12$

$(\frac{8}{1})\frac{1}{8}x = 2(\frac{8}{1})$
 $x = 16$

4. $-\frac{2}{3}p + \frac{1}{2} = \frac{5}{6}$

$(-\frac{3}{2})-\frac{2}{3}p = \frac{1}{3}(\frac{3}{2})$
 $p = -\frac{1}{2}$

$\frac{5}{6} - \frac{1}{2} =$
 $\frac{5}{6} - \frac{3}{6} = \frac{2}{6}$
 $\frac{1}{3}$

5. $\frac{7}{8}x - 9 = 5$

$(\frac{8}{7})\frac{7}{8}x = \frac{24}{1}(\frac{8}{7})$
 $x = 16$

6. $-\frac{16}{3} = \frac{3}{4}n - 20$

$(\frac{4}{3})\frac{4}{3} = \frac{3}{4}n(\frac{4}{3})$
 $\frac{16}{3} = n$

Homework: Daffynition Decoder wkst.

Adapted: Daffynition Decoder wkst. Choose any 10 problems

$\boxed{5\frac{1}{3} = n}$