

1 Step Equations multiplication and division

inverse operations

multiplication inverse is division
division inverse is multiplication

Properties

Multiplication Property of Equality

- multiply the same # on both sides

Division Property of Equality

- divide the same # on both sides

ex.) $\frac{3}{1} \cdot \frac{y}{3} = 5 \cdot 3$

$\frac{3y}{3}$

$y = 15$

$\frac{15}{3} = 5$

$3 \cdot 5 = 5$

ex.) $6 \cdot \frac{h}{6} = 9 \cdot 6$

$h = 54$

$\frac{54}{6} = 9$

$9 = 9$

ex.) $a = 16 \cdot 4$

$\frac{a}{4} = 64$

$\frac{64}{4} = 16$

$16 = 16$

$$\text{ex.) } \frac{3a}{3} = \frac{24}{3}$$
$$a = 8$$

$$3 \cdot 8 = 24$$
$$24 = 24$$

$$\text{ex.) } \frac{-2a}{-2} = \frac{124}{-2}$$
$$a = -62$$

$$-2 \cdot (-62) = 124$$
$$124 = 124$$

$$\text{ex.) } \frac{-5a}{-5} = \frac{25}{-5}$$
$$a = -5$$

$$-5 \cdot (-5) = 25$$
$$25 = 25$$

$$\text{ex.) } \frac{1}{2} a = 12 \cdot \frac{2}{1}$$
$$a = 24$$

$$\frac{1}{2} (24) = 12$$
$$\frac{24}{2} = 12$$
$$12 = 12$$

$$\text{ex.) } \frac{14}{5} = \frac{x}{5} \cdot \frac{5}{5}$$
$$70 = x$$

$$14 = \frac{70}{5}$$
$$14 = 14$$

$$\text{ex.) } \frac{1}{5} h = 25 \cdot \frac{5}{5}$$
$$h = 125$$

$$\frac{1}{5} (125) = 25$$
$$25 = 25$$