

Multiplying Negatives and variables

Recall, that there are different rules for multiplying signed numbers together, the results follow a pattern:

- 1.) $(+)(+) = (+)$
- 2.) $(+)(-) = (-)$, $(-)(+) = (-)$
- 3.) $(-)(-) = (+)$

Recall also, That a variable can represent more than one number. Solve each problem for each number for the given variable.

Ex. $-3x = ?$ $\{x = -1, 0, 1\}$
 $-3(-1) = 3$, $-3(0) = 0$, $-3(1) = -3$

Ex. $2x = ?$ $\{x = -2, -1, 2\}$
 $2(-2) = -4$, $2(-1) = -2$, $2(2) = 4$

exercises:

- 1.) $x = ?$ $\{x = -1, 0, 1\}$
- 2.) $2x = ?$ $\{x = 2, 4, 6\}$
- 3.) $3x = ?$ $\{x = 3, 5, 9\}$
- 4.) $-4x = ?$ $\{x = 8, 7, 12\}$
- 5.) $5x = ?$ $\{x = 4, 3, 5\}$
- 6.) $-2x = ?$ $\{x = -2, -8, 0\}$
- 7.) $3t = ?$ $\{t = 1, 0, -1\}$
- 8.) $0x = ?$ $\{x = 4, -4, 2, -2\}$
- 9.) $-5x = ?$ $\{x = -1, 1, -2, 2\}$
- 10.) $10x = ?$ $\{x = 1, 0, 3, -3\}$