

8.4 Solving Equations Day 2

May 15, 2019 8:32 AM

Remember - when solving equations that have variables on the same side \Rightarrow Bedmas / group. When variables on the opposite sides \Rightarrow opposites!

Solve the following

$$1. \quad 3(5x+3) = 2(3x+18)$$

$$15x + 9 = 6x + 36$$

$-6x$ $-6x$

$$9x + 9 = 36$$

-9 -9

$$9x = 27$$

$\div 9$ $\div 9$

$$x = 3$$

Brackets must be 'removed' using distribution

$$15x + 9 = 6x + 36$$

$-15x$ $-15x$

$$9 = -9x + 36$$

-36 -36

$$-27 = -9x$$

$\div -9$ $\div -9$

$$3 = x$$

$$2. \quad 3(2.1b - 1.2) = 4(0.7b + 0.85)$$

$$6.3b - 3.6 = 2.8b + 3.4$$

$-2.8b$ $-2.8b$

$$3.5b - 3.6 = 3.4$$

$+3.6$ $+3.6$

$$\frac{3.5b}{3.5} = \frac{7}{3.5}$$

$$b = 2$$