9/21/18

Other solutions to equations

$$5x - 11 = 3x - 3$$

$-3x \qquad -3x$

$$2x - 11 = -3$$

$+3 \qquad +3$

$$2x - 8 = 0$$

$+8 \qquad +8$

$$\frac{2x}{2} = \frac{8}{2}$$

$$x = 4$$

one solution

$$2(x+5) = 2x + 10$$

$$2x + 10 = 2x + 10$$

$-2x \qquad -2x$

$$10 = 10$$

OR

$$2x + 10 = 2x + 10$$

$-10 \qquad -10$

infinite solutions

$\frac{2x}{2} = \frac{2x}{2}$

$x = x$

infinitely many solutions

Any number

$14 + 3x - 5 = 2x + 3 + x$

$3x + 9 = 3x + 3$

$-3x \quad -3x$

$9 \neq 3$

no solutions

Try

① $-2x + 12 + 10x = 4(2x + 3)$

$12 = 12$ infinitely many

② $3(x - 6) + 12 = 6(x + 1) - 3x$

$-6 = 6$ no solutions

③ $3x + 1 = 4x - 3$

$x = 4$ one solution

work with partner

$$3(x-6)+12=6(x+1)-3x$$

$$3x+18+12=6x+6+3x$$

$$3x-6=3x+6$$

$$-3x \qquad -3x$$

$$-6 \neq 6$$