

Algebra /

Solving equations with zero, one, or infinitely many solutions

$$3(x+2) + 4 = 5(x-1) + x$$

$$3x + 6 + 4 = 5x - 5 + 1x$$

$$3x + 10 = 6x - 5$$

$$-6x + 10 = -5$$

$$-3x = -15$$

$$x = 5$$

$$-6(u+1) + 8u = 2(u-3)$$

$$-6u - 6 + 8u = 2u - 6$$

$$2u - 6 = 2u - 6$$

$$-6 = -6$$

Since both sides are equal,
all real numbers solutions.

* Note: if they are not equal then it's no solution