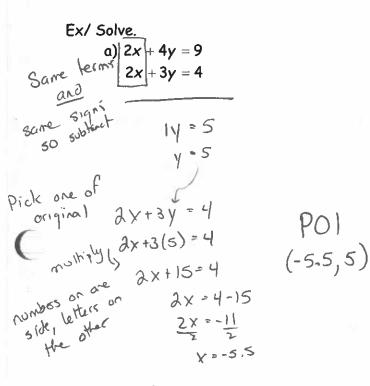
Solving by Elimination

- When neither equation is arranged in the form y = or x =, a third method of solving is needed: elimination.
- This method eliminates one of the variables by either adding or subtracting the two equations together.
- Identify the coefficient that is the same in both equations, then examine its sign. The rule is SAME SIGN SUBTRACT!



b)
$$3x + 2y = 5$$
 $x - 2y = -1$
 $4x = 4$
 $x - 2y = -1$
 $-2y = -1 - 1$
 $-2y = -2$
 $y = 1$

POI(1,1)

If no coefficients are equal, multiply the whole equation by a constant (make an equivalent equation)

Same sign subtract

e)
$$3x + 2y = 1$$
 mothiply by $2x + 4y = -2$ 2

$$-4x = -4$$

$$-4x = -4$$

$$2x + 4y = -2$$

$$2(1) + 4y = -2$$

$$2 + 4y = -2$$

$$4y = -2 - 2$$

$$4y = -4$$

$$7001 (1,-1)$$

$$4 = -1$$

Ex/ Four chocolate bars and three ice-cream cones cost \$5.30. Two chocolate bars and one ice-cream cost \$2.20. Find the cost of a chocolate bar and the cost of an ice-cream cone.

$$4b+3c=5.30$$

 $2b+c=2.20$ — Multiply by 3

Subsect
$$4b+3c=5.30$$

 $-2b=-1.30$
 $b=0.65$
 $b=0.65$
 $b=0.65$
 $c=2.20-1.30$
 $c=0.9$

.. Bars cost \$0.65 and cones \$0.90

Practice: Handout - Solving by Elimination