

65 Simplify $-3(4x - 4) + 2(x - 6)$. Show the steps and the properties you used to simplify the expression. [4]

66 Complete the table for $y = -4x + 2$. [3]

x	-2	-1	0	1	2	3
y	10	6				

67 Simplify and solve the following inequality, using any method. Show the method you used to solve the problem. Then represent the solution on the number line provided. [3]



$$-7 + 2x + 3 < 4x - 9 + 3x$$

- 65 Simplify $-3(4x - 4) + 2(x - 6)$. Show the steps and the properties you used to simplify the expression. [4] **I.D.6.**

-10x; Sample answer:

$$-3(4x - 4) + 2(x - 6)$$

$$= -3(4x) + (-3)(-4) + 2(x) + 2(-6) \quad \text{Distributive Property}$$

$$= -12x + 12 + 2x + (-12) \quad \text{Multiply.}$$

$$= -12x + 2x + 12 + (-12) \quad \text{Commutative Property of Addition}$$

$$= (-12x + 2x) + [12 + (-12)] \quad \text{Associative Property of Addition}$$

$$= (-10x) + [0] \quad \text{Add.}$$

$$= -10x \quad \text{Additive Identity}$$

- 66 Complete the table for $y = -4x + 2$. [3] **II.A.3.**

x	-2	-1	0	1	2	3
y	10	6	2	-2	-6	-10

- 67 Simplify and solve the following inequality, using any method. Show the method you used to solve the problem. Then represent the solution on the number line provided. [3] **II.C.2.**



$$-7 + 2x + 3 < 4x - 9 + 3x$$

Sample answer:

$$-7 + 2x + 3 < 4x - 9 + 3x$$

$$-4 + 2x < 7x - 9$$

$$-4 + 2x - 7x < -9$$

$$-4 - 5x < -9$$

$$-5x < -5$$

$$x > 1$$