

CCGPS Algebra  
Algebraic Properties

Name \_\_\_\_\_

$4x + 7 = 2x + 1$

- a)  $-2x$       $-2x$
- b)  $2x + 7 = 0 + 1$
- c)  $2x - 7 = 1$
- d)  $-7$       $-7$
- e)  $2x + 0 = -6$
- f)  $2x = -6$
- g)  $2 = 2$
- h)  $1x = -3$
- i)  $x = -3$

- a) Subtraction prop. of equality
- b) additive inverse
- c) additive identity
- d) subtraction prop. of equality
- e) additive inverse
- f) additive identity
- g) division prop. of equality
- h) multiplicative inverse
- i) multiplicative identity

$2 \cdot \frac{1}{2}$

$26 = 3x + 2(3 + x)$

- a)  $26 = 3x + 6 + 2x$
- b)  $26 = 3x + 2x + 6$
- c)  $26 = 5x + 6$
- d)  $-6$       $-6$
- e)  $20 = 5x + 0$
- f)  $20 = 5x$
- g)  $5 = 5$
- h)  $4 = 1x$

- a) distributive prop
- b) Commutative
- c) CLT
- d) subtraction prop. of equal
- e) additive inverse
- f) additive identity
- g) division prop. of equality
- h) multiplicative inverse
- i) multiplicative identity
- i) Symmetric

- i)  $4 = x$
- j)  $x = 4$

$4 > x$   
 $x < 4$

$5 + 6 = 6 + 5$   
 $4a = a \cdot 4$