



B  
L  
A  
C  
K

M  
A  
S  
T  
E  
R  
S  
  
L  
I  
N  
E

# Mix-N-Match

## Pre-Algebra

# Properties of Arithmetic

### OBJECTIVES

Students will determine which property of arithmetic is demonstrated by a given equation or number sentence

### MATERIALS

Mix-N-Match cards (on the following page)

### DIRECTIONS

Cut out the Mix-N-Match cards and distribute them to students. Students mix (that is, mingle about the classroom) and find a partner to work with. Partners quiz each other regarding the problems on their cards. Once each partner is clear as to the correct answer, partners trade cards and mix again. Students continue to quiz and trade with partners as many times as the teacher sees fit. When the teacher yells, "Freeze! Find your match!" students purposely seek out someone whose equation demonstrates the same property as theirs and move to the perimeter of the room.

24   M i x - N - M a t c h   B l a c k l i n e   M a s t e r s

**Properties of Arithmetic**

Name the property demonstrated: $3 + 8 = 8 + 3$	Name the property demonstrated: $45 + 10 = 10 + 45$
Name the property demonstrated: $12 \times 3 = 3 \times 12$	Name the property demonstrated: $4 \times 8 = 8 \times 4$
Name the property demonstrated: $(3 + 6) + 5 = 3 + (6 + 5)$	Name the property demonstrated: $8 + (9 + 32) = (8 + 9) + 32$
Name the property demonstrated: $7 \times (9 \times 5) = (7 \times 9) \times 5$	Name the property demonstrated: $(12 \times 4) \times 7 = 12 \times (4 \times 7)$
Name the property demonstrated: $5(8 + 3) = (5 \times 8) + (5 \times 3)$	Name the property demonstrated: $11(4 + 10) = (11 \times 4) + (11 \times 10)$

Kagan Publishing • 1 (800) WEE CO-OP  
www.KaganOnline.com

25   M i x - N - M a t c h   B l a c k l i n e   M a s t e r s

**Properties of Arithmetic**

Name the property demonstrated: $15(6 - 3) = (15 \times 6) - (15 \times 3)$	Name the property demonstrated: $9(13 - 7) = (9 \times 13) - (9 \times 7)$
Name the property demonstrated: $34 + 0 = 34$	Name the property demonstrated: $0 + 18 = 18$
Name the property demonstrated: $53 \times 1 = 53$	Name the property demonstrated: $1 \times 22 = 22$
Name the property demonstrated: $3 + (-3) = 0$	Name the property demonstrated: $(-15) + 15 = 0$
Name the property demonstrated: $9 \times (\frac{1}{9}) = 1$	Name the property demonstrated: $(\frac{1}{5}) \times 5 = 1$

Kagan Publishing • 1 (800) WEE CO-OP  
www.KaganOnline.com

**Properties of Arithmetic**

Name the property demonstrated:

$$3 + 8 = 8 + 3$$

Name the property demonstrated:

$$45 + 10 = 10 + 45$$

Name the property demonstrated:

$$12 \times 3 = 3 \times 12$$

Name the property demonstrated:

$$4 \times 8 = 8 \times 4$$

Name the property demonstrated:

$$(3 + 6) + 5 = 3 + (6 + 5)$$

Name the property demonstrated:

$$8 + (9 + 32) = (8 + 9) + 32$$

Name the property demonstrated:

$$7 \times (9 \times 5) = (7 \times 9) \times 5$$

Name the property demonstrated:

$$(12 \times 4) \times 7 = 12 \times (4 \times 7)$$

Name the property demonstrated:

$$5(8 + 3) = (5 \times 8) + (5 \times 3)$$

Name the property demonstrated:

$$11(4 + 10) = (11 \times 4) + (11 \times 10)$$

**Properties of Arithmetic**

Name the property demonstrated:

$$15 ( 6 - 3 ) = ( 15 \times 6 ) - ( 15 \times 3 )$$

Name the property demonstrated:

$$9 ( 13 - 7 ) = ( 9 \times 13 ) - ( 9 \times 7 )$$

Name the property demonstrated:

$$34 + 0 = 34$$

Name the property demonstrated:

$$0 + 18 = 18$$

Name the property demonstrated:

$$53 \times 1 = 53$$

Name the property demonstrated:

$$1 \times 22 = 22$$

Name the property demonstrated:

$$3 + (-3) = 0$$

Name the property demonstrated:

$$(-15) + 15 = 0$$

Name the property demonstrated:

$$9 \times \left(\frac{1}{9}\right) = 1$$

Name the property demonstrated:

$$\left(\frac{1}{5}\right) \times 5 = 1$$

**Properties of Arithmetic**

Name the property demonstrated:

$$a + 7 = 7 + a$$

Name the property demonstrated:

$$c + d = d + c$$

Name the property demonstrated:

$$12(m + n) = 12m + 12n$$

Name the property demonstrated:

$$9(y + 5) = 9y + (9 \times 5)$$

Name the property demonstrated:

$$d + 0 = d$$

Name the property demonstrated:

$$0 + 17 = 17$$

Name the property demonstrated:

$$p \times (6 \times r) = (p \times 6) \times r$$

Name the property demonstrated:

$$(10 \times 5) \times G = 10 \times (5G)$$

Name the property demonstrated:

$$a\left(\frac{1}{a}\right) = 1$$

Name the property demonstrated:

$$\left(\frac{1}{12}\right) \times 12 = 1$$