

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Properties of Whole Numbers

**Q1. Write the property for each of the following.**

a.  $2 + 3 = 5$ , a whole number \_\_\_\_\_

b.  $84 + 0 = 84$  \_\_\_\_\_

c.  $56 + 89 = 89 + 56$  \_\_\_\_\_

d.  $34 + (12 + 23) = (34 + 12) + 23$  \_\_\_\_\_

e.  $77 \times 0 = 0$  \_\_\_\_\_

f.  $1 \times 66 = 66$  \_\_\_\_\_

g.  $20(10 + 5) = (20 \times 10) + (20 \times 5)$  \_\_\_\_\_

**Q2. Solve the following using distributive property.**

a.  $234 \times 13 + 234 \times 7$

b.  $405 + 405 \times 29$

c.  $3845 \times 5 \times 782 + 769 \times 25 \times 218$

## Answers

### Properties of Whole Numbers

#### **Q1. Write the property for each of the following.**

- a.  $2 + 3 = 5$ , a whole number      Closure Property For Addition
- b.  $84 + 0 = 84$       Additive Identity
- c.  $56 + 89 = 89 + 56$       Commutative Property For Addition
- d.  $34 + (12 + 23) = (34 + 12) + 23$       Associative Property Of Addition
- e.  $77 \times 0 = 0$       Multiplication Property Of Zero
- f.  $1 \times 66 = 66$       Multiplicative Identity
- g.  $20(10 + 5) = (20 \times 10) + (20 \times 5)$       Distributive of multiplication over addition

#### **Q2. Solve the following using distributive property.**

a.  $234 \times 13 + 234 \times 7$   
 $= 234(13 + 7)$   
 $= 234(20)$   
 $= 4680$

b.  $405 + 405 \times 29$   
 $= 405(1 + 29)$   
 $= 405(30)$   
 $= 12150$

c.  $3845 \times 5 \times 782 + 769 \times 25 \times 218$   
 $= (769 \times 5) \times 5 \times 782 + 769 \times 25 \times 218$   
 $= 769 \times 25 \times 782 + 769 \times 25 \times 218$   
 $= 769 \times 25(782 + 218)$   
 $= 19225(1000)$   
 $= 19225000$