

## Extra Practice 2

### Lesson 2.2: Developing Rules to Multiply Integers

1. Find each product. Then extend each pattern for three more rows. Tell how you did it.

a)  $(+4) \times (+1) =$

b)  $(+1) \times (+5) =$

$(+4) \times (0) =$

$(0) \times (+5) =$

$(+4) \times (-1) =$

$(-1) \times (+5) =$

$(+4) \times (-2) =$

$(-2) \times (+5) =$

2. a) When is the product of two integers positive?

b) When is the product of two integers negative?

3. Find each product.

a)  $(+2)(-9)$

b)  $(-2)(-6)$

c)  $(+7)(-2)$

d)  $(-3)(+4)$

e)  $(-1)(-1)(-1)$

f)  $(-1)(+5)(-1)(+5)$

4. Find each product.

a)  $(+15) \times (+22)$

b)  $(+20)(-43)$

c)  $(-34) \times (-27)$

d)  $(-62)(+11)$

e)  $(+18) \times (-67)$

f)  $(-31)(-52)$

5. Use these integers:  $-1, +6, -8, +3, -2$

a) Which two integers have the greatest product?

b) Which two integers have the least product?

Justify your answers.

# Extra Practice Sample Answers

## Extra Practice 2 – Master 2.19

### Lesson 2.2

1. a) +4; 0; -4; -8;

$$(+4) \times (-3) = -12$$

$$(+4) \times (-4) = -16$$

$$(+4) \times (-5) = -20$$

b) +5; 0; -5; -10;

$$(-3) \times (+5) = -15$$

$$(-4) \times (+5) = -20$$

$$(-5) \times (+5) = -25$$

2. a) The product of two integers is positive when the integers have the same sign.

b) The product of two integers is negative when the integers have opposite signs.

3. a) -18

c) -14

e) -1

4. a) +330

c) +918

e) -1206

b) +12

d) -12

f) +25

b) -860

d) -682

f) 1612

5. a) +3 and +6; the greatest product will be a product of two numbers with the same sign and largest size. So, it will be  $(+3) \times (+6) = +18$  or  $(-2) \times (-8) = +16$ .

b) +6 and -8; the least product will be a product of two numbers with opposite signs and largest size. So, it will be  $(+6) \times (-8) = -48$ .