

Unit Review

LESSON

2.1 1. Write each multiplication as a repeated addition. Then illustrate using coloured tiles to find each sum.

$$\begin{aligned} \text{a) } (+5) \times (-2) &= \underline{\hspace{2cm}} \\ &= \underline{\hspace{2cm}} \end{aligned}$$

$$\begin{aligned} \text{b) } (+3) \times (+5) &= \underline{\hspace{2cm}} \\ &= \underline{\hspace{2cm}} \end{aligned}$$

$$\begin{aligned} \text{c) } (+3) \times (-3) &= \underline{\hspace{2cm}} \\ &= \underline{\hspace{2cm}} \end{aligned}$$

$$\begin{aligned} \text{d) } (-4) \times (+2) &= (+2) \times \underline{\hspace{1cm}} \\ &= \underline{\hspace{2cm}} \\ &= \underline{\hspace{2cm}} \end{aligned}$$

2. Use a number line. Find each product.

$$\text{a) } (+5) \times (-1) = \underline{\hspace{2cm}}$$

$$\text{b) } (+3) \times (+4) = \underline{\hspace{2cm}}$$

$$\text{c) } (-2) \times (+6) = \underline{\hspace{2cm}}$$

$$\text{d) } (+4) \times (-5) = \underline{\hspace{2cm}}$$

LESSON

3. a) The temperature rose 2°C each hour for 6 h. Use integers to find the total change in temperature.

- b) If the starting temperature was -4°C , what was the temperature after 6 h?

4. Show how to model $(-2) \times (-5)$. Explain why you chose that model.

- 2.2 5. Complete each statement using positive, negative, or zero.

- a) The product of a positive integer and a negative integer is _____.
- b) The product of a negative integer and zero is _____.
- c) The product of an two negative integers is _____.

6. Find each product.

- a) $(+2)(+3) =$ _____ b) $(-6)(+4) =$ _____
- c) $(-22)(-10) =$ _____ d) $(+24)(-30) =$ _____
- e) $(-36)(-5) =$ _____ f) $(+42)(+3) =$ _____
- g) $(-81)(+2) =$ _____ h) $(-237)(0) =$ _____

7. Fill in the blank to make each equation true.

- a) $(-6) \times \underline{\hspace{2cm}} = -24$ b) $(-9) \times \underline{\hspace{2cm}} = +27$
- c) $\underline{\hspace{2cm}} \times (-3) = (-21)$ d) $(-4) \times \underline{\hspace{2cm}} = +24$
- e) $(+20) \times \underline{\hspace{2cm}} = +300$ f) $(-32) \times \underline{\hspace{2cm}} = -160$

LESSON

13. Write the next 3 terms in each pattern. Then write the pattern rule.

a) $+1, -4, +16, -64, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \dots$

Pattern rule: Start at $\underline{\hspace{1cm}}$. $\underline{\hspace{1cm}}$ each time.

b) $-128, +64, -32, 16, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \dots$

Pattern rule: Start at $\underline{\hspace{1cm}}$. $\underline{\hspace{1cm}}$ each time.

c) $-3125, +625, -125, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \dots$

Pattern rule: Start at $\underline{\hspace{1cm}}$. $\underline{\hspace{1cm}}$ each time.

2.5 **14.** State which operation you would do first. Do not evaluate.

a) $(+8) + (-2) \times (-3)$

b) $(-20) \div (-4) - (-2)$

$\underline{\hspace{3cm}}$

$\underline{\hspace{3cm}}$

c) $(-2)(4 - 5)$

d) $5 - 3 + (-4) \times (-2)$

$\underline{\hspace{3cm}}$

$\underline{\hspace{3cm}}$

15. Evaluate each expression in question 14. Show all your steps.

a)

b)

c)

d)

LESSON

16. Evaluate using the order of operations.

a) $17 - 4 \times 4 =$

b) $-48 \div 4 - 2(3 - 4) =$

c) $-2 - 4 \times 9 =$

d) $\frac{(-6)(8-2)}{-4} =$

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

f) $\frac{21 + 2(3)}{(-3) \times (-3)} =$