Name: _____ Date: _____

# 8 Chapter Review

Key Words
For #1 to # 5, use the word list to complete each statement.

| zero	brackets	product	zero pair	quotient

1. Integers include positive and negative whole numbers and _____.

2. To find the answer for $-2 + (4 - 9) \div 5 \times 3$, do _____ first.

3. An integer chip for +1 and an integer chip for –1 are together called

   a _____.

4. To find the _____ means you multiply.

5. When (–10) is divided by (+5), the _____ is (–2).

8.1 Exploring Integer Multiplication, pages 416–422

6. Write the multiplication statement for each diagram.

   a)

   b)

   (_____) × (_____) = _____   (_____) × (_____) = _____
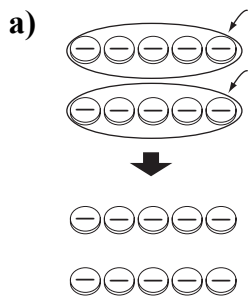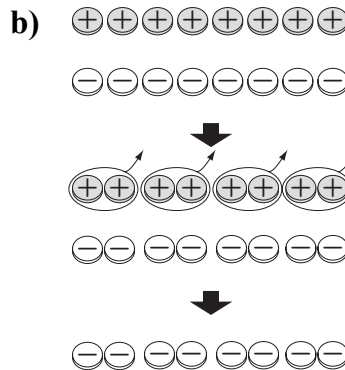
7. Find the product. Draw integer chips to show your thinking.

   a) (+3) × (+3)   **b)** (+4) × (–5)

8. A sloth took 9 min to climb down a tree.
He moved down 2 m/min.
How far did the sloth climb down?

Total time = (_____)

Distance for 1 min = (_____)

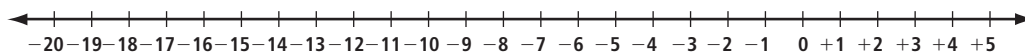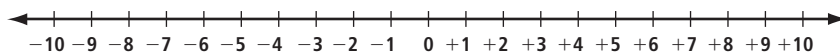(_____) × (_____) = _____

The sloth climbed down _____ m in 9 min.

8.2 Multiplying Integers, pages 424–428

9. Find the product using a number line.

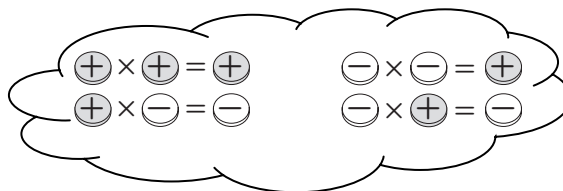a) $(+3) \times (-6) =$ _____

b) $(+4) \times (+2) =$ _____

10. Calculate. Use the sign rule.

a) $(+7) \times (-8) =$ _____

b) $(-10) \times (-9) =$ _____

11. Estimate and calculate $(-49) \times (+11)$.

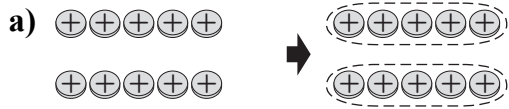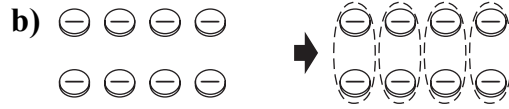*Estimate:*   *Calculate:*

Name: _____ Date: _____

8.3 Exploring Integer Division, pages 430–435

12. Use the diagrams to complete the division statements.

a)

$(+10) \div (+2) =$ _____

$(+10) \div (+5) =$ _____

b)

$(-8) \div (-2) =$ _____
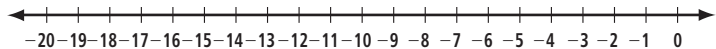
$(-8) \div (+4) =$ _____

13. Find each quotient. Draw integer chips to show your thinking.

a) $(-14) \div (-2)$

b) $(-2) \div (+2)$

8.4 Dividing Integers, pages 437–443

14. Find $(-18) \div (-3)$ using a number line.

(_____) ÷ (_____) = _____

15. Calculate. Use the sign rule.

a) $(+75) \div (+25) =$ _____

b) $(+64) \div (-8) =$ _____

c) $(-85) \div (+5) =$ _____

d) $(-88) \div (-11) =$ _____
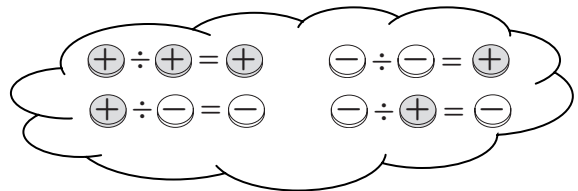
16. Six friends went to the zoo.
The total cost was $90.
It was Riley's birthday, so the others paid for him.
How much did the others each pay?

Number of people paying = (+_____)

Total cost of admission = (_____)

Division statement: (_____) ÷ (_____) = _____

The others each paid $_____.

Name: _____ Date: _____

8.5 Applying Integer Operations, pages 445–451

17. Calculate.

a) $(-4) - (-10) \div (-5)$

     = _____   Divide.

     = $(-4) + (+$ _____ $)$ Add the opposite.

     = _____

b) $12 \div [(-4) + (-2)]$

                                    Brackets.

                                    Divide.

18. A small plane descended 90 m at 3 m/s.
Then it descended 80 m at 2 m/s.
For how much time did it descend altogether?

Descend means to go down.

90 m at 3 m/s:

Descending 90 m = (–_____)

Number of m/s = (_____)

80 m at 2 m/s:

Descending 80 m = (–_____)

Number of m/s = (_____)

   Time descending at 3 m/s + time descending at 2 m/s

= $(-90) \div ($ _____ $) + (-80) \div ($ _____ $)$ Divide first.

= _____ + _____   Add.

= _____

Sentence: _____

19. The daily low temperatures in Winnipeg, Manitoba were –2 °C, +3° C, –4 °C, and –5 °C.
What was the mean temperature?

Add the temperatures:

Mean = sum ÷ number of days

Sentence: _____