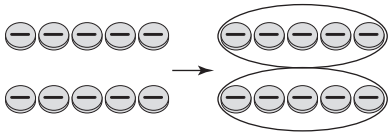
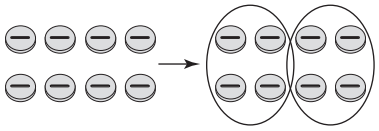
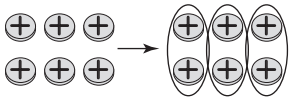
Name: _____ Date: _____

8.3 Exploring Integer Division

***MathLinks 8,* pages 300–305**

Key Ideas Review

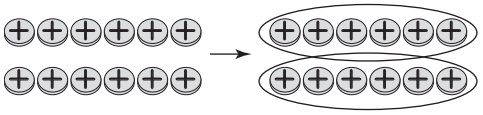
Draw a line from the model in Column A to the matching integer division statement in Column B.

A	B
1. 	**a)** $(-8) \div (-4) = +2$
2. 	**b)** $(+6) \div (+2) = +3$
3. 	**c)** $(-10) \div (+2) = -5$

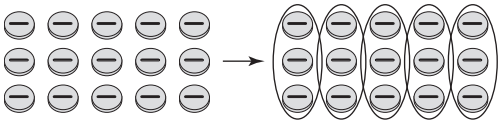
Practise and Apply

4. Use the diagrams to complete each division statement.

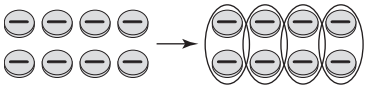
a) $(+12) \div (+6) =$ _____



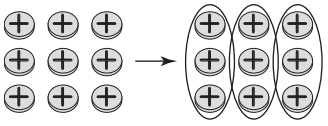
b) $(-15) \div (-3) =$ _____



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



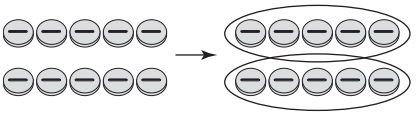
d) $(+9) \div (+3) =$ _____



5. Use the diagram below each question to solve both statements.

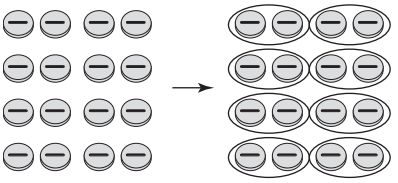
a) $(-10) \div (+2) =$ _____

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



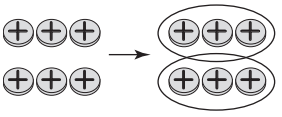
b) $(-16) \div (-2) =$ _____

$(-16) \div (+8) =$ _____



c) $(+6) \div (+3) =$ _____

$(+6) \div (+2) =$ _____



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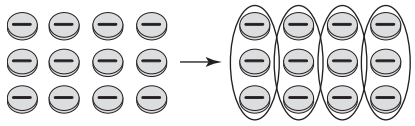
6. Use the diagram to solve both statements.

$(-12) \div (+4) =$ _____

$(-12) \div (-3) =$ _____



7. Draw a diagram to solve each question.

a) $(-14) \div (-7) =$ _____

b) $(+18) \div (+9) =$ _____

8. Examine this pattern.

$(-20) \div (-5) =$ _____

$(-15) \div (-5) =$ _____

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

$(-5) \div (-5) =$ _____

$0 \div (-5) =$ _____

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

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

a) Use integer chips to complete the first four lines. Describe the pattern.

_____

_____

_____

b) Extend the pattern to determine the quotient $(+10) \div (-5)$.

9. Use the division of two integers to represent each situation and solve the problem.

a) Marcus scored 18 points during three games at his basketball tournament this weekend. If he scored the same number of points in each game, how many did he score per game?

b) Kellie played four games of hockey this weekend. She was on the ice when her opponents scored 20 goals. Her stats receive a -1 each time. What are her stats for each game this weekend?

10. If the road's posted maximum speed is 100 km/h, how long will it take to drive 21 km? Use the division of two integers to represent this situation, then solve.

11. Penelope gets a pay cheque of $750 every two weeks. If she works Monday to Friday, how much is earned each day? Use the division of two integers to represent this situation, then solve.