8.5

Applying Integer Operations

MathLinks 8, pages 312-317

Key Ideas Review

For #1 and #2, unscramble the letters to form a word that correctly completes the statement.

1. If you are solving a problem with integers, you need to decide which

_____ to perform.

2. Some integer problems involve the ______ of REDOR

SAPTOOREIN .

3. Put the statements in order according to the order of operations.

_____ Multiply and divide, from left to right.

_____ Add and subtract, from left to right.

_____ Brackets.

Practise and Apply

4. Calculate using the order of operations. Show your thinking.

a)
$$(+21) \div (-3) + (-2) \div (+1)$$

b)
$$(-15) \div [(-3) \times (-1)] + (+2)$$

c)
$$(-2) \times (-5) \div (-2) + (-7)$$

d)
$$[(-3) + (-8)] + (-1) \times (-4)$$

5. Calculate.

a)
$$(-7) + (-5) \times (+6) \div (-10)$$

b)
$$(-3) - (-4) \times (-10) - (-12)$$

6. The chart shows the change in the attendance at games night.

Week	1	2	3	4	5	6
Attendance	+12	-4	+6	-10	+15	+1

- a) How many people were there the last week?
- **b)** Create an integer statement to show the change in attendance from week 1 to week 6.

- **7.** Zelia loses seven points every three minutes that she doesn't make it to the next level on the video game.
 - a) If she plays for 24 minutes without reaching the next level, how many points has she lost?



- **b)** If she played for three hours this month and never made it to the next level, how many points did she lose?
- c) If she lost 567 points, for how long did she play without reaching the next level?
- **8.** The temperature change in the chicken egg incubator is recorded every hour (on a 24-h clock). The temperature at 8 a.m. was 35 °C.

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1	Гime	9	10	11	12	13	14	15	16
Г	Temp(°C)	+2	+1	+1	-3	-1	+4	-1	-2

a) When was the temperature

highest? _____

When was it lowest? _

b) Write an integer statement to represent the mean temperature change over the period shown.

9. Par 3 means that an expert golfer would take three strokes to complete the hole. The score indicates how many more (+) or fewer (-) strokes the player took to complete the hole. This is Paco's scorecard.

Hole	1	2	3	4	5	6	7	8	9
Par	3	3	3	3	3	3	3	3	3
Score	-1	+1	-2	Par	-2	+3	-1	+1	Par

a) How many strokes did Paco take to complete the nine holes? Write an integer statement to represent the score, then solve.

b) If his friend scored +1 on each hole, how many strokes did he take in total?

