Chapter 8 Problems of the Week

- **1.** How many pairs of two-digit integers can you find that have a product of -600?
- 2. Find two integers such that
 - both are odd
 - their sum is negative
 - their product is −135
 - one is a perfect square
 - neither is a factor of the other
- **3.** The scoring for the Grade 8 Provincial Math Challenge includes the following:
 - There are 40 questions on the test.
 - Two points are awarded for each correct question.
 - For each incorrect answer, −3 points are scored.

Kelsey's final score on her test was 0.

- **a)** How many of the 40 questions did she answer correctly?
- b) Does this type of scoring seem fair to you? Explain why some math contests use this method of scoring.

- **4.** Liam throws 10 darts at a dartboard.
 - If a dart lands on an even number he adds his score.
 - If a dart lands on an odd number he subtracts his score.

Liam's darts land on the following numbers: 2 darts on 19, 3 darts on 10, 1 dart on 18, 1 dart on 1, 2 darts on 9, and 1 dart on 5. What is his total score?

- **5.** Follow the rules to write as many expressions as possible that equal 12, 24, -2, and -10:
 - Use any operation and/or brackets.
 - Use exactly four integers from the following list: 2, 8, -4, -5, -6.
- **6.** To win a free trip you must answer a skill-testing question:

$$1 + 4 - 2 + 9 \div 3 - 6 \times 2 + 10 = ?$$

Jackie answered 6. Does she win the trip?