Least Common Multiple

Factors & Multiples

Name: _____ Date: _____ Grade 6

1. List the multiples of each number, up to 100.

a 14

b 18

c 25

d 30

2. Consider the numbers 4 and 10.

a What are the first six multiples of 4?

b What are the first six multiples of 10?

c What are the first two common multiples of 4 and 10?

d What is the least common multiple (LCM) of 4 and 10?

3. Consider the numbers 6 and 9.

a What are the first eight multiples of 6?

b What are the first eight multiples of 9?

c What are the first two common multiples of 6 and 9?

d What is the least common multiple (LCM) of 6 and 9?

4. Determine the least common multiple of each pair of numbers. Explain your thinking.

a 7 and 4

b 6 and 8

5. Select all the common multiples of 5 and 6.

- ☐ **A.** 20
- ☐ **B.** 30
- ☐ **C.** 45
- ☐ **D.** 60
- ☐ **E.** 75
- ☐ **F.** 90

6. Holiday lights blink at different intervals.

a A red light blinks every 4 seconds and a green light blinks every 6 seconds. List the first three times (in seconds) when both lights blink at the same time.

b A blue light blinks every 2 seconds and a white light blinks every 8 seconds. List the first three times when both lights blink at the same time.

7. For a class party, napkins are sold in packages of 15 and cups are sold in packages of 18.

a What is the fewest number of packages of each you can buy so that there are the same number of napkins and cups?
Napkins: _____ Cups: _____

b How many matching napkin-and-cup sets will there be? _____

8. Ava, Ben, and Cami each found the least common multiple of 4, 6, and 9.

- Ava says the least common multiple is 36.
- Ben says the least common multiple is 24.
- Cami says the least common multiple is 216.

Who is correct? Explain your thinking.