

## Worksheet 1.9

### Least Common Multiples.

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Find the least common multiple of the set of numbers. See examples on pages 73-74 in text.

1. 4, 12

- A) 48      B) 4      C) 3      D) 12

2. 12, 11

- A) 132      B) 12      C) 66      D) 23

3. 36, 45

- A) 1620      B) 12      C) 3      D) 180

4. 2, 7, 11

- A) 154      B) 20      C) 77      D) 14

5. 7, 14, 8

- A) 56      B) 14      C) 784      D) 112

6. 24, 18, 28

- A) 252      B) 504      C) 672      D) 168

*Solve the problem. See examples on page 76 in text.*

7. At a national computer show, two software companies continuously run videos showing their products. Company A's video repeats every 33 minutes, while company B's video repeats every 21 minutes. If both companies begin the videos at 1:00 P.M. when the show opens, how many minutes will elapse before they are in sync again?

- A) 231 minutes      B) 154 minutes      C) 77 minutes      D) 462 minutes

8. Robert has built a mechanical model solar system with three balls representing planets at the ends of rods attached to the center representing the sun. The planets are aligned when he turns on the motor. The innermost planet makes a revolution in 12 seconds, the middle planet makes a revolution in 20 seconds, and the outermost planet makes a revolution in 28 seconds. After how many seconds will the planets be aligned again?

- A) 630 seconds      B) 210 seconds      C) 840 seconds      D) 420 seconds

*Find the prime factorization of the number. See examples on pages 63-64 in text.*

9. 249

- A)  $3 \cdot 81$       B)  $3 \cdot 83$       C)  $3 \cdot 3 \cdot 83$       D)  $3 \cdot 3$

*Simplify. See examples on page 58 in text.*

10.  $81 \div 3 + \{8 \times [18 - (3 \times 2)]\}$

- A) 113      B) 118      C) 126      D) 123