Section 10.R.2 Least Common Multiple (LCM)

Go to Section 10.R.2 Learn mode in Hawkes to follow along!

Least Common Multiple (LCM)

The **multiples** of a number are _____

Least Common Multiple (LCM)

The **least common multiple (LCM)** of two (or more) counting numbers is _____

_____

To Find the LCM of a Set of Counting Numbers

1. Find the _____
2. List the _____
3. Find the product of these primes using each _____

_____

Example 7 Finding the Least Common Multiple (LCM)

Find the LCM for 12, 18, and 66; then state how many times each number divides into the LCM.

Solution

Exercises

Find the LCM of each set of numbers.

1. 9, 12

2. 16, 28

3. 2, 3, 11

4. 15, 25, 30, 40

For each set of numbers, **a.** find the LCM and **b.** state how many times each number divides into the LCM.

5. 10, 15, 25

6. 12, 18, 27

Finding Equivalent Fractions

Finding Equivalent Fractions

To find a fraction equivalent to $\frac{a}{b}$, multiply the _____

_____

$$\frac{a}{b} = \frac{a}{b} \cdot \_\_\_\_\_$$

For example, _____

Example 10 Finding Equivalent Fractions

Find the missing numerator that will make the fractions equivalent.

$$\frac{3}{4} = \frac{?}{28}$$

Solution

Exercises

For each equation, find the missing numerator that will make the fractions equivalent.

7. $\frac{2}{5} = \frac{?}{25}$

8. $\frac{1}{16} = \frac{?}{64}$

9. $\frac{10}{11} = \frac{?}{44}$

10. $\frac{5}{21} = \frac{?}{42}$

11. $\frac{5}{8} = \frac{?}{96}$

12. $\frac{9}{10} = \frac{?}{90}$

13. $\frac{10}{3} = \frac{?}{33}$

14. $\frac{9}{7} = \frac{?}{84}$

15. Three swimmers decide to swim laps together, and they will quit when they reach the starting end of the pool together. The first swimmer can swim a lap in 35 seconds, the second will take 40 seconds, and the third takes 42 seconds.

a. How many seconds will it take before they quit?

b. How many laps will each swimmer swim in that interval?