REVIEW: Multiples of Whole Numbers

Name _____

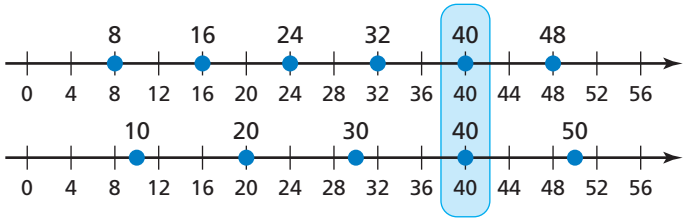
Key Concept and Vocabulary

Multiples of 8:
8, 16, 24, 32, (40), 48, . . .

Multiples of 10:
10, 20, 30, (40), 50, . . .

least common multiple

Visual Model



Skill Examples

1. The LCM of 4 and 6 is **12**.
2. The LCM of 1 and 3 is **3**.
3. The LCM of 3 and 5 is **15**.
4. The LCM of 12 and 40 is **120**.
5. The LCM of 11 and 33 is **33**.

The LCM of two primes is their product.

Application Example

6. Find the minimum number of 6-taco packages that will serve 4 people with no tacos left over.

The LCM of 4 and 6 is **12**.

For 1 package, there will be 6 tacos and 2 will be left over. For 2 packages, there will be **12 tacos**. Each person gets 3.

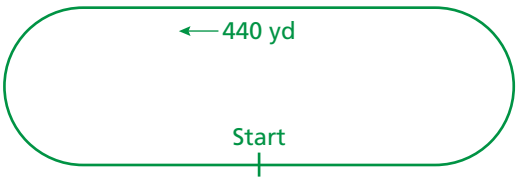
PRACTICE MAKES *PURR*-FECT™

Check your answers at BigIdeasMath.com.

Find the least common multiple of the two whole numbers.

7. 3 and 7: 21
8. 3 and 6: 6
9. 6 and 9: 18
10. 9 and 12: 36
11. 6 and 21: 42
12. 24 and 30: 120
13. 24 and 32: 96
14. 15 and 40: 120
15. 48 and 128: 384

16. **RUNNING** One trip around a track is 440 yards. One runner can complete one lap in 8 minutes. Another can complete a lap in 6 minutes. How long will it take for both to arrive at the starting point together if they start at the same place? 24 minutes



17. **BUYING TACOS** Find the minimum number of 5-taco packages that will serve 4 people with no tacos left over. How many will each person get?
For 4 packages, there will be 20 tacos. Each person gets 5.

18. **HOW MANY PENNIES?** With the same collection of pennies, you can make stacks that have 3 pennies, 4 pennies, or 9 pennies with none left over. How many pennies do you have?
36 pennies; 12 stacks of 3 pennies, 9 stacks of 4 pennies, and 4 stacks of 9 pennies