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## Key Concept and Vocabulary

Multiples of 8:
$8,16,24,32,40,48, \ldots$
Multiples of 10 :
$10,20,30,40,50, \ldots$
least common multiple


## Skill Examples

1. The LCM of 4 and 6 is $\mathbf{1 2}$.
2. The LCM of 1 and 3 is $\mathbf{3}$.
3. The LCM of 3 and 5 is $\mathbf{1 5}$.
4. The LCM of 12 and 40 is $\mathbf{1 2 0}$.

The LCM of two primes is their product.

## PRACTICE makes PURR-FECT ${ }^{\text {Tm }}$

## 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 $\mathbf{1 2}$.
$\therefore \quad$ 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 .

Visual Model


Find the least common multiple of the two whole numbers.
7. 3 and 7 : $\qquad$ 8. 3 and 6 : $\qquad$ 9. 6 and 9 : $\qquad$
10. 9 and 12 : $\qquad$ 11. 6 and 21 : $\qquad$ 12. 24 and 30 : $\qquad$
13. 24 and 32 : $\qquad$ 14. 15 and 40 : $\qquad$ 15. 48 and 128 : $\qquad$
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? $\qquad$

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?
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?

