

_____ Name _____ Date _____

TEST: Least Common Multiple, Greatest Common Factor & Distributive Property

Find the LCM of each set of numbers (1 point each).		
1) 8 and 10	2) 4 and 9	3) 7 and 12
Answer:	Answer:	Answer:

Find the GCF of each set of numbers (1 point each).		
4) 8 and 12	5) 28 and 56	6) 68 and 51
Answer:	Answer:	Answer:

Use the distributive property to factor out the GREATEST COMMON FACTOR of each expression (2 points each).

7) $8 + 12$

8) $8 + 10$

9) $36 + 60$

Solve each problem, be sure to include a word or unit in your answer.

10) Destiny just received two separate gifts from her grandmother. The first gift is a box of 18 candy bars, and the second gift is a pack of 12 cookies.

Destiny wants to use all of the candy bars and cookies to make identical snack bags for her cousins.

What is the greatest number of snack bags that Destiny can make? How many of each snack will be in one bag? (3pts)

11) At the first baseball game of the season, every 6th person entering the ballpark received a coupon for a free hot dog. Every 10th person received a coupon for a free soft drink.

Which person(s) will receive a free hot dog and soft drink at the same time? (2pts)

Circle **all** that apply.

- A. 10th B. 16th
C. 30th D. 60th

12) Rasha is the coordinator for a fireworks display. He plans to use two different types of fireworks for the first part of the display. 1 Blossom will be launched every 7 seconds. 1 Sunburst will be launched every 12 seconds. How many seconds will pass before both types of fireworks are launched at the exact same time again? (2pts)

13) Sandra brings cheese and crackers for lunch every 6 days, and Lily brings cheese and crackers every 8 days. If they both brought cheese and crackers today, how many days will it be before both girls bring cheese and crackers again? (2pts)

14) The table shows the number of students in the school choir. The choir teacher plans to arrange the students in equal rows. She wants the same number of girls on each row, and the same number of boys on each row. What is the greatest number of rows she can create? How many boys will be on each row? How many girls will be on each row? (3pts)

Students	Number
Girls	48
Boys	64

15) Buses from two different bus routes each stop at the same corner at 9 A.M. Buses from one route stop at that corner every 9 minutes. Buses from the other route stop there every 12 minutes. What is the fewest number of minutes that will pass until the next time buses from both routes are at that corner at the same time? (2pts)

- A. 21 minutes
- B. 36 minutes
- C. 54 minutes
- D. 108 minutes

___ Name _____ Block ___ Date _____
Least Common Multiple, Greatest Common Factor, and Distributive Property Assessment

SOLUTIONS

Find the LCM of each set of numbers (1 point each).

1) 8 and 10	2) 4 and 9	3) 7 and 12
40	36	84
Answer:	Answer:	Answer:

Find the GCF of each set of numbers (1 point each).

10) 8 and 12	11) 28 and 56	12) 68 and 51
4	28	17
Answer:	Answer:	Answer:

Use the distributive property to factor out the GREATEST COMMON FACTOR of each expression (2 points each).

13) $8 + 12$

$4(2+3)$

14) $8 + 10$

$2(4+5)$

15) $36 + 60$

$12(3+5)$

Solve each word problem, be sure to include a word or unit in your answer.

10) Destiny just received two separate gifts from her grandmother. The first gift is a box of 18 candy bars, and the second gift is a pack of 12 cookies.

Destiny wants to use all of the candy bars and cookies to make identical snack bags for her cousins.

What is the greatest number of snack bags that Destiny can make? How many of each snack will be in one bag? (3pts)

6 snack bags
3 candy bars
2 cookies

11) At the first baseball game of the season, every 6th person entering the ballpark received a coupon for a free hot dog. Every 10th person received a coupon for a free soft drink.

Which person(s) will receive a free hot dog and soft drink at the same time? (2pts)

Circle **all** that apply.

- A. 10th B. 16th
C. 30th D. 60th

C and D

12) Rasha is the coordinator for a fireworks display. He plans to use two different types of fireworks for the first part of the display. 1 Blossom will be launched every 7 seconds. 1 Sunburst will be launched every 12 seconds. How many seconds will pass before both types of fireworks are launched at the exact same time again? (2pts)

84 seconds

13) Sandra brings cheese and crackers for lunch every 6 days, and Lily brings cheese and crackers every 8 days. If they both brought cheese and crackers today, how many days will it be before both girls bring cheese and crackers again? (2pts)

24 days

14) The table shows the number of students in the school choir. The choir teacher plans to arrange the students in equal rows. She wants the same number of girls on each row, and the same number of boys on each row. What is the greatest number of rows she can create? How many boys will be on each row? How many girls will be on each row? (3pts)

Students	Number
Girls	48
Boys	64

16 rows
3 girls
4 boys

15) Buses from two different bus routes each stop at the same corner at 9 A.M. Buses from one route stop at that corner every 9 minutes. Buses from the other route stop there every 12 minutes. What is the fewest number of minutes that will pass until the next time buses from both routes are at that corner at the same time? (2pts)

- A. 21 minutes
- B. 36 minutes
- C. 54 minutes
- D. 108 minutes

b . 36 minutes