



Mathematics Grade 6

Ready EOG Practice 6.NS.4 (GCF/LCM/Distributive Property)

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Rockingham County

2013 - 2014

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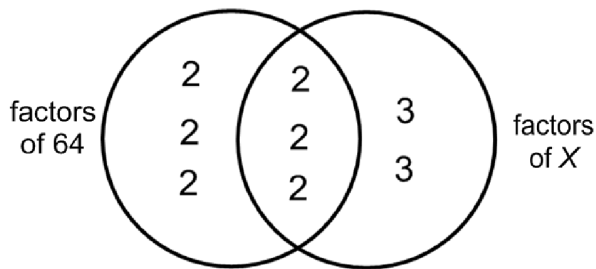
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1. What is the greatest common factor of 48 and 36?
- A. 6
- B. 8
- C. 12
- D. 24
2. Norma is buying hot dogs and hot dog buns for a street party. Hot dogs are sold in packages of 8 and buns in packages of 12.
- What is the *least* number of packages of hot dogs and hot dog buns that Norma can buy to have an equal number of hot dogs and buns?
- A. 2 packages of hot dogs and 2 packages of hot dog buns
- B. 3 packages of hot dogs and 2 packages of hot dog buns
- C. 4 packages of hot dogs and 5 packages of hot dog buns
- D. 5 packages of hot dogs and 4 packages of hot dog buns
3. What is the *greatest* common factor of 21, 35 and 63?
- A. 1
- B. 3
- C. 7
- D. 9
4. Which is the *least* common multiple of 5, 12 and 15?
- A. 30
- B. 60
- C. 120
- D. 180
5. A restaurant sells fried chicken in a 12-piece bucket. The restaurant also sells 8 biscuits in a box. Joe wants to have the same number of biscuits as he has pieces of fried chicken.
- How many buckets of chicken and boxes of biscuits should Joe buy?
- A. 4 buckets of chicken and 3 boxes of biscuits
- B. 3 buckets of chicken and 4 boxes of biscuits
- C. 3 buckets of chicken and 2 boxes of biscuits
- D. 2 buckets of chicken and 3 boxes of biscuits
6. What is the greatest common factor of 64 and 80?
- A. 320
- B. 160
- C. 32
- D. 16

7. What is the least common multiple of 4, 6, and 9?

A. 54
 B. 36
 C. 24
 D. 18

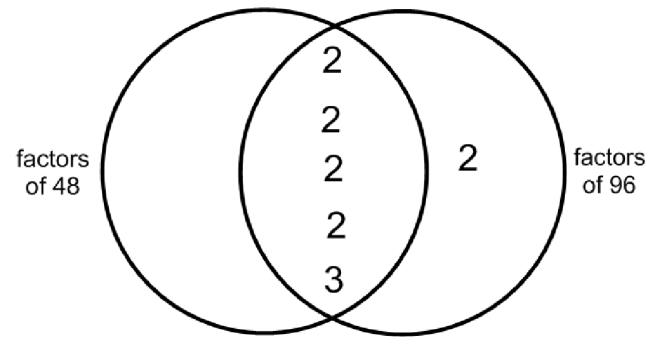
8. The Venn Diagram shows the prime factors of two different numbers.



What is the value of X ?

A. 64
 B. 70
 C. 72
 D. 84

9. The Venn diagram shows the prime factors of two different numbers.



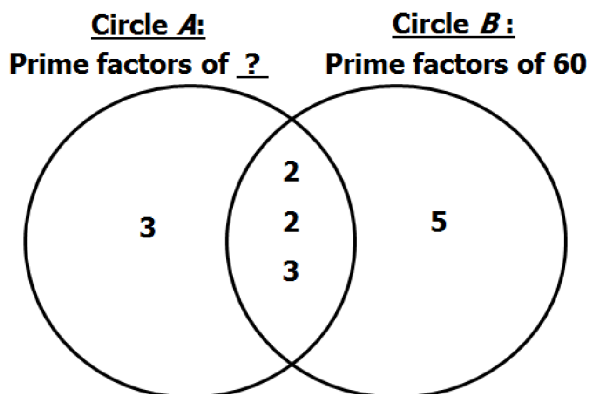
What is the greatest common factor of 48 and 96?

A. 2
 B. 11
 C. 24
 D. 48

10. Heidi claimed that the least common multiple of 6 and 9 is 72. Which statement about Heidi's claim is correct?

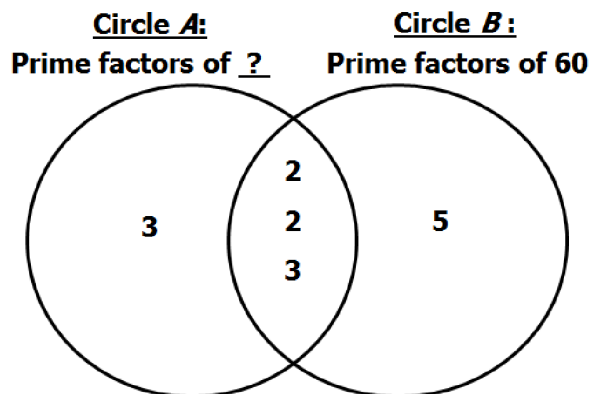
A. Heidi is correct because $6 \times 12 = 72$ and $9 \times 8 = 72$.
 B. Heidi is incorrect. The least common multiple of 6 and 9 is 3.
 C. Heidi is incorrect. The least common multiple of 6 and 9 is 18.
 D. Heidi is correct because 3 is a multiple of 6, 9, and 72.

11. What number should replace the question mark above Circle A?



- A. 10
B. 27
C. 36
D. 72

12. Which statement can be concluded from the diagram?



- A. The least common multiple of 3 and 5 is 12.
B. The least common multiple of 36 and 60 is 2.
C. The greatest common factor of 3 and 5 is 12.
D. The greatest common factor of 36 and 60 is 12.
13. For an end-of-year party, Mrs. Smith purchased 98 stickers and 56 lollipops. Each student will receive an equal number of stickers and an equal number of lollipops. There will be no stickers or lollipops leftover.
- Based on this information, what is the *greatest* number of students Mrs. Smith can have in her class?
- A. 28 students
B. 26 students
C. 16 students
D. 14 students

14. Which expression uses the greatest common factor and the Distributive Property to find the sum of 72 and 56?
- A. $72 + 56$
 $2(36 + 28)$
 $2(64)$
128
- B. $72 + 56$
 $4(18 + 14)$
 $4(32)$
128
- C. $72 + 56$
 $6(12 + 11)$
 $6(23)$
138
- D. $72 + 56$
 $8(9 + 7)$
 $8(16)$
128
15. Which expression correctly illustrates the GCF being factored out of the expression $72 + 40$?
- A. $2(36 + 20)$
- B. $4(18 + 10)$
- C. $6(12 + 7)$
- D. $8(9 + 5)$
-

#	Answer	Objective
1.	C	Obj : 6.NS.4. Find the greatest common factor of two ...
2.	B	Obj : 6.NS.4. Find the greatest common factor of two ...
3.	C	Obj : 6.NS.4. Find the greatest common factor of two ...
4.	B	Obj : 6.NS.4. Find the greatest common factor of two ...
5.	D	Obj : 6.NS.4. Find the greatest common factor of two ...
6.	D	Obj : 6.NS.4. Find the greatest common factor of two ...
7.	B	Obj : 6.NS.4. Find the greatest common factor of two ...

#	Answer	Objective
8.	C	Obj : 6.NS.4. Find the greatest common factor of two ...
9.	D	Obj : 6.NS.4. Find the greatest common factor of two ...
10.	C	Obj : 6.NS.4. Find the greatest common factor of two ...
11.	C	Obj : 6.NS.4. Find the greatest common factor of two ...
12.	D	Obj : 6.NS.4. Find the greatest common factor of two ...
13.	D	Obj : 6.NS.4. Find the greatest common factor of two ...
14.	D	Obj : 6.NS.4. Find the greatest common factor of two ...
15.	D	Obj : 6.NS.4. Find the greatest common factor of two ...

Objectives Measured:	Items	Questions measuring this objective
Obj : 6.NS.4. Find the greatest common factor of two ...	15	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15

#	Key	Item ID
1.	C	MC 35735
2.	B	MC 32122
3.	C	MC 49804
4.	B	MC 49805
5.	D	MC 117822
6.	D	MC 117825
7.	B	MC 117827

#	Key	Item ID
8.	C	MC 126510
9.	D	MC 126511
10.	C	MC 117826
11.	C	MC 140100
12.	D	MC 140101
13.	D	MC 140102
14.	D	MC 140105
15.	D	MC 140185