

## Unit 2 Study Guide [This is the first half.

You'll get the second Half tomorrow]

Student \_\_\_\_\_

Class \_\_\_\_\_

Date \_\_\_\_\_

1. In 2011, Molly and Jerry both went to the beach. Molly goes to the beach every 2 years. Jerry goes to the beach every 3 years. What is the next year that both Molly and Jerry will go to the beach in the same year?

- A. 2013
- B. 2016
- C. 2017
- D. 2018

2. What is the prime factorization of 36?

- A.  $2^2 \times 3$
- B.  $2^2 \times 3^2$
- C.  $2^3 \times 3$
- D.  $2^3 \times 2^3$

3. What is the prime factorization of 51?

- A.  $3 \times 17$
- B.  $1 \times 3 \times 17$
- C.  $1 \times 51$
- D.  $25 \times 26$

4. Olivia has 54 slices of ham and 27 slices of cheese to make sandwiches.

- All sandwiches will have ham and cheese on them.
- Each sandwich will have the same number of cheese slices.
- Each sandwich will have the same number of ham slices.

What is the greatest number of sandwiches that Olivia can make?

- A. 9
- B. 18
- C. 27
- D. 54

5. What is the prime factorization of 50?

- A.  $2 \times 2^5$
- B.  $2 \times 5^2$
- C.  $5 \times 5^2$
- D.  $2 \times 25$

6. Which of the following shows the prime factorization of 75?

- A.  $5^2 \times 3$
- B.  $3^2 \times 5$
- C.  $2^3 \times 5$
- D.  $2 \times 3 \times 5$

7. Which of the following pairs of numbers has 16 as their greatest common factor?

- A. 32, 48
- B. 32, 62
- C. 48, 36
- D. 42, 16

8. What is the least common multiple (LCM) for 3 and 12?

- A. 3
- B. 6
- C. 12
- D. 24

9. Which expression is equal to  $72 + 99$ ?

- A.  $3(24 + 23)$
- B.  $3(24 + 32)$
- C.  $9(8 + 11)$
- D.  $9(8 + 12)$

10. What is the least common multiple of 6 and 12?

- A. 6
- B. 12
- C. 18
- D. 72