

TEST NAME: **Math 6 - Unit 2 - Study Guide**
TEST ID: **3251945**
GRADE: **06 - Sixth Grade**
SUBJECT: **Mathematics**
TEST CATEGORY: **Shared Classroom Assessments**

09/24/19, Math 6 - Unit 2 - Study Guide

Student: _____
Class: _____
Date: _____

1. Ms. Bryant puts pens and pencils in gift bags for her students.

- She has 72 pencils and 54 pens.
- Each bag will have the same number of pencils.
- Each bag will have the same number of pens.
- No pens or pencils will be left over.

What is the greatest number of gift bags Ms. Bryant can make?

- A. 6
- B. 8
- C. 9
- D. 18

2. There are 18 chaperones and 81 students going on a class field trip.

- All of the students and chaperones will be in a group.
- The same number of students will be in each group.
- The same number of chaperones will be in each group.

What is the greatest number of groups that can be formed?

- A. 2
- B. 3
- C. 9
- D. 18

3. 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

4. Which expression is the prime factorization of 40?

- A. 2×20
- B. $2^2 \times 10$
- C. $2^3 \times 5$
- D. 5×8

5. Mr. Wilson makes snack bags for a field trip.

- He has 90 crackers and 75 cookies.
- Each bag will have an equal number of crackers.
- Each bag will have an equal number of cookies.
- No crackers or cookies will be left over.

What is the largest number of bags Mr. Wilson can make?

- A. 5
- B. 15
- C. 25
- D. 75

6. Sarah feeds her fish every 2 days and her snake every 6 days. In 30 days, how many times will Sarah feed her fish and snake on the same day?

- A. 3
- B. 5
- C. 12
- D. 15

7. What is the greatest common factor (GCF) of 12 and 96?

- A. 4
- B. 6
- C. 12
- D. 24

8. What is the least common multiple of 2 and 4?

- A. 2
- B. 4
- C. 6
- D. 8

9. Which is the prime factorization of 96?

- A. $2 \times 2 \times 2 \times 2 \times 6$
- B. $2 \times 2 \times 2 \times 2 \times 2 \times 2$
- C. $2 \times 2 \times 2 \times 2 \times 2 \times 3$
- D. $2 \times 2 \times 2 \times 2 \times 3 \times 3$

10. What is the prime factorization of 90?

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

11. Mr. Bender is putting his middle school band students into groups.

- There are 32 seventh graders and 40 eighth graders in the band.
- Each group will have the same number of seventh grade students.
- Each group will have the same number of eighth grade students.
- Every student will be in a group.

What is the largest number of groups Mr. Bender can create?

- A. 2
- B. 4
- C. 8
- D. 16

12. 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. $2 \times 3 \times 5$

13. A teacher has to make groups from her class of 24 boys and 18 girls.

- Each group will have boys and girls.
- Each group will have the same number of girls.
- Each group will have the same number of boys.
- All students will be in a group.

What is the greatest number of groups the teacher can make?

- A. 3
B. 4
C. 6
D. 9

14. Which of the following shows the prime factorization of 56?

- A. 7×8
B. $2^2 \times 7$
C. $2^3 \times 7$
D. $2 \times 4 \times 7$

15. Which expression is equal to $48 + 72$?

- A. $24(2 + 3)$
B. $8(6 + 12)$
C. $3(14 + 24)$
D. $2(24 + 38)$

16. Which expression is equal to $20 + 30$?

- A. $2(12 + 15)$
B. $5(4 + 5)$
C. $6(3 + 5)$
D. $10(2 + 3)$

17. Which of the following shows the prime factorization of 48?

- A. $2 \times 4 \times 3$
B. $2^4 \times 3$
C. $4^2 \times 3$
D. $2 \times 3 \times 8$

18. At a store, markers are sold in packages of 12 and pens are sold in packages of 8. What is the LEAST number of markers and pens Rick needs to buy to have an equal number of markers and pens?

- A. 12
B. 20
C. 24
D. 40

19. Which is the prime factorization of 54?

- A. $2 \times 3 \times 9$
B. $2 \times 2 \times 3 \times 3$
C. $2 \times 3 \times 3 \times 3$
D. $2 \times 3 \times 3 \times 3 \times 3$

20. A typical football field is 100 yards long. What is the prime factorization of 100?

- A. 2×50
B. $2^2 \times 5^2$
C. $2^3 \times 5^3$
D. $2^2 \times 25$