## Choose the correct answer.

- **1.** Mariska was decorating her room. She arranged 63 picture tiles on a wall in the shape of a rectangle. How many rows of tiles could be on the wall?
  - A 2
  - в 5
  - **c** 6
  - **D** 9
- 2. Cecilia was skip counting with a friend on the school bus. Cecilia started to count by 7s. She said 7, 14, 21, 28, and 35. What number will she say next?
  - **A** 36
  - **B** 40
  - **c** 42
  - **D** 49
- 3. Ms. Chan is Dwight's math teacher. During class, she asked if the number 6 is a prime number or a composite number. How should Dwight answer Ms. Chan's question?
  - A 6 is prime.
  - **B** 6 is composite.
  - **c** 6 is neither prime nor composite.
  - **D** 6 is both prime and composite.

- 4. Elijah uses 17 connecting cubes to make a model of a kitchen. The kitchen model is in the shape of a rectangle and is one cube high. How many different ways could Elijah make the model of the kitchen?
  - **A** 0
  - в 1
  - **c** 3
  - **D** 17
- 5. In a math game, Rob reads four statements about the number 51. He has to pick the true statement to win the game. Which statement should Rob choose?
  - A 51 is divisible by 2.
  - **B** 51 is divisible by 3.
  - c 51 is divisible by 5.
  - **D** 51 is a prime number.

- **6.** Janice spent \$54 to buy some pairs of pants. Each pair of pants cost the same whole-dollar amount. How many pairs of pants could she have bought?
  - **A** 3
  - в 4
  - **c** 5
  - **D** 7
- 7. Ms. Ayers wrote a bonus problem on the board. If Jason correctly answers, he will get extra computer time. The problem is to write a statement that correctly relates the numbers 5 and 10. Which should Jason write?
  - A 5 is a multiple of 10.
  - **B** 10 is a factor of 5.
  - **c** 10 is a common multiple of 5 and 10.
  - 15 is a common multiple of 5 and 10.

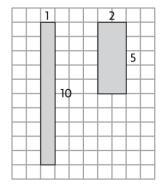
**8.** Caitlin's teacher wrote a row of numbers with a pattern.

What is the rule for the pattern?

- A add 2, subtract 7
- B add 5, subtract 2
- c subtract 7, add 2
- **D** subtract 2, add 5
- 9. Miles has a train collection with 36 engines, 72 boxcars, and 18 cabooses. He wants to arrange the train cars in equal rows, with only one type of train car in each row. How many can he put in each row?
  - **A** 1 or 18
  - **B** 1, 2, 9, or 18
  - **c** 1, 2, 3, 6, 9, or 18
  - **D** 1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36, or 72

- 10. A store in Roger's neighborhood sells boxes of pencils that have 3 pencils in each box. Roger bought several boxes of pencils at the store. Which could be the number of pencils he bought?
  - **A** 16
  - в 21
  - **c** 25
  - **D** 32
- 11. Jenn will use 18 connecting cubes to make a model of a park. The model will be in the shape of a rectangle and will have a height of one cube. In how many different ways can Jenn make the model of the park?
  - **A** 1
  - **B** 2
  - **c** 3
  - **D** 17

- **12.** Roberto wrote the number 60. If the rule is *subtract* 3, what is the fifth number in Roberto's pattern?
  - **A** 75
- **c** 48
- в 72
- **D** 45
- **13.** Elina had 10 tiles to arrange in a rectangular design. She drew a model of the rectangles she could make with the 10 tiles.



What can Elina conclude about the number 10 from her model?

- **A** 10 is a prime number.
- **B** 10 is a composite number.
- **c** 10 is neither prime nor composite.
- **D** 10 is both prime and composite.

- 14. Marie made 3 dozen cookies. She needs to put them into equal groups so that the number of groups is at least 4 but less than 10. What are all the possible equal-size groups she can make with all the cookies?
  - **A** 4, 6, or 9 groups
  - **B** 4 or 6 groups
  - c 4 or 9 groups
  - **D** 4, 6, or 8 groups
- 15. Jorge gives an equal number of marbles to 6 friends. Which could be the total number of marbles he gave to his friends?
  - A 15
  - **B** 33
  - **c** 56
  - **D** 60

- Petra and Peter were playing a game. Petra was counting by 9s. Peter was counting by 4s. They paced the counting so that they would say the first common number together. What is the first number that both said together?
  - **A** 16
  - **B** 36
  - **c** 45
  - **D** 64
- 17. Sean helps his coach at the end of the game. He needs to put away 24 baseballs. He puts the same number of baseballs into each box. Which list shows how many baseballs could be in each box?
  - **A** 1, 3, 4, or 7
  - **B** 2, 4, 6, or 7
  - **c** 2, 6, 8, or 10
  - **D** 3, 4, 6, or 8

- **18.** Kendall has 45 dolphin stickers, 15 shark stickers, and 20 whale stickers. She wants to put an equal number of stickers into bags, with only one type of sticker in each bag. How many stickers can Kendall put in each bag?
  - **A** 1
  - **B** 1 or 5
  - **c** 1, 3, 4, or 5
  - **D** 1, 2, 3, 4, 5, 9, 10, 15, 20, or 45
- **19.** Julie used chalk to write numbers on the chairs for field day. She marked the number 4 on the first chair. Her rule was *add* 5. What numbers did she write on the first six chairs?
  - **A** 4, 8, 13, 18, 23, 28
  - **B** 4, 9, 14, 19, 24, 29
  - **c** 5, 9, 13, 17, 21, 25
  - **D** 9, 14, 19, 24, 29, 34

- 20. Maria tells her friend that she is learning about prime numbers in math class. Her friend writes down 4 numbers and asks Maria to choose the prime number. Which number should Maria choose?
  - A 21
  - **B** 23
  - **c** 25
  - **D** 27
- 21. Lee and 4 friends want to play marbles. Lee has 40 marbles to share among them. All players must have the same number of marbles to start the game. How many marbles should each player get?
  - **A** 5
  - **B** 8
  - **c** 10
  - **D** 20

- 22. Manny makes dinner using 1 box of pasta and 1 jar of sauce. If pasta is sold in packages of 6 boxes and sauce is sold in packages of 3 jars, what is the least number of dinners that Manny can make without any supplies left over?
  - **A** 3
  - **B** 6
  - **c** 9
  - **D** 18
- 23. Gina's homework assignment was to find all the common factors of 24 and 36. So, Gina made a list of all the factors of 24 and 36. She used the list to find the factors the two numbers had in common. Which list shows the common factors that Gina found?
  - **A** 1, 2, 3, 4, 6, 8, 12, 24
  - **B** 1, 2, 4, 6, 8, 9, 12, 24
  - **c** 1, 2, 3, 4, 6, 12
  - **D** 1, 6, 8, 12

- 24. Emily wants to make a rectangular model with a height of one connecting cube. She wants to make the model in exactly 2 different ways. How many connecting cubes could Emily use to make the model in only two ways?
  - **A** 6
  - в 12
  - **c** 16
  - **D** 18
- **25.** Ben and Irie made a secret code. They wrote some numbers of the code so they could remember the pattern.

What should the next number be?

- **A** 18
- в 19
- **c** 23
- **D** 26