Unit 4 Test Form B

Name _____ Date _____

Fill in the circle for the correct answer. *Show your work.*

1. Dylan has 8 times as many football cards as baseball cards. Which equation compares Dylan's football and baseball cards?

   Ⓐ $f \times b = 8$
   Ⓑ $b = 8 + f$
   ● $f = 8b$
   Ⓓ $f = 8 + b$

2. A truck driver delivers 245 gallons of milk to one store. He delivers 185 gallons of milk to a second store. Which equation shows how many gallons of milk the truck driver delivers in all?

   ● $245 + 185 = g$; $g = 430$ gallons
   Ⓖ $245 + 185 = g$; $g = 420$ gallons
   Ⓗ $245 - 185 = g$; $g = 60$ gallons
   Ⓚ $245 - 185 = g$; $g = 50$ gallons

3. A box holds 112 cans of cat food. Which equation shows how many cans of cat food are in 8 full boxes?

   Ⓐ $8 + 112 = c$; $c = 110$ cans
   Ⓑ $8 + 112 = c$; $c = 120$ cans
   Ⓒ $8 \times 112 = c$; $c = 886$ cans
   ● $8 \times 112 = c$; $c = 896$ cans

4. There are 18 umbrellas at the beach shop. There are 3 times as many chairs as umbrellas. Which equation shows how many chairs are at the beach shop?

   Ⓕ $c = 18 \div 3$; $c = 6$ chairs
   Ⓖ $c = 18 - 3$; $c = 15$ chairs
   Ⓗ $c = 3 + 18$; $c = 21$ chairs
   ● $c = 3 \times 18$; $c = 54$ chairs

5. Gwen sold 2,412 movie tickets last weekend. That is 4 times the number of tickets sold on Wednesday. Which equation shows the number of tickets sold on Wednesday?

   ● $4t = 2{,}412$; $t = 603$ tickets
   Ⓑ $4t = 2{,}412$; $t = 630$ tickets
   Ⓒ $4 + t = 2{,}412$; $t = 2{,}408$ tickets
   Ⓓ $4 + t = 2{,}412$; $t = 2{,}308$ tickets

6. Mr. Brady has \$987. He buys a DVD player for \$171 and some movies for \$112. Which equation shows how much money Mr. Brady has left?

Ⓕ $987 + (171 + 112) = m$; $m = \$1{,}270$

Ⓖ $987 + (171 - 112) = m$; $m = \$1{,}046$

Ⓗ $987 - (171 - 112) = m$; $m = \$928$

● Ⓚ $987 - (171 + 112) = m$; $m = \$704$

Solve for ▒ or *n*.

7. $(17 + 13) \div (15 - 9) = n$

Ⓐ $n = 4$ ● Ⓑ $n = 5$ Ⓒ $n = 6$ Ⓓ $n = 8$

8. $(16 - 7) \cdot 6 = ▒ \cdot 6$

Ⓕ ▒ $= 6$ Ⓖ ▒ $= 7$ Ⓗ ▒ $= 8$ ● Ⓚ ▒ $= 9$

List all factor pairs for the number.

9. 31

Ⓐ 0 and 30

● Ⓑ 1 and 31

Ⓒ 0 and 31; 1 and 31

Ⓓ 1 and 30; 1 and 31

10. 42

Ⓕ 1 and 42; 6 and 7

Ⓖ 1 and 42; 3 and 14; 6 and 7

● Ⓗ 1 and 42; 2 and 21; 3 and 14; 6 and 7

Ⓚ 1 and 42; 2 and 21; 3 and 14; 4 and 10; 6 and 7

11. Which number is composite?

● Ⓐ 21 Ⓑ 37 Ⓒ 43 Ⓓ 59

12. Which number is prime?

Ⓕ 15 ● Ⓖ 29 Ⓗ 57 Ⓚ 63

13. Which number is a multiple of 9?

Ⓐ 32 Ⓑ 49 Ⓒ 56 ● Ⓓ 63

Name _____ Date _____

14. Which number is a multiple of 6?

Ⓕ 28 Ⓖ 32 ● Ⓗ 48 Ⓚ 56

Use the rule to find the next 3 terms in the pattern.

15. 7, 14, 28, 56, ...
Rule: multiply by 2

Ⓐ 102, 204, 408 Ⓒ 122, 244, 488
● Ⓑ 112, 224, 448 Ⓓ 132, 264, 528

16. 50, 85, 120, 155, ...
Rule: add 35

● Ⓔ 190, 225, 260 Ⓗ 180, 215, 250
Ⓖ 190, 225, 250 Ⓚ 180, 215, 245

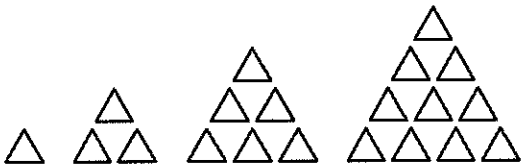
17. 3, 9, 27, 81, ...
Rule: multiply by 3

Ⓐ 162, 324, 648 Ⓑ 162; 486; 1,458 Ⓒ 243, 486, 972 ● Ⓓ 243; 729; 2,187

Describe the next term of the pattern.

18. 

Ⓕ shaded triangle ● Ⓗ unshaded triangle
Ⓖ shaded pentagon Ⓚ unshaded pentagon

19. 

Ⓐ 5 rows with 16 triangles Ⓒ 6 rows with 14 triangles
● Ⓑ 5 rows with 15 Ⓓ 6 rows with 12 triangles

20. Two friends are planning a 116-mile canoe trip that will last 4 days. They want to travel the same number of miles each day. Which equation shows how many miles they will travel each day?

Ⓕ $116 \div 4 = m$; $m = 27$ miles Ⓗ $116 \times 4 = m$; $m = 464$ miles
● Ⓖ $116 \div 4 = m$; $m = 29$ miles Ⓚ $116 \times 4 = m$; $m = 444$ miles

21. A website gets a large number of hits. Then it gets 1,060 more hits. The website gets 12,565 hits in all. Which equation can be used to show the hits the website had first?

- (A) $h + 1{,}060 = 12{,}565$
- (B) $h = 1{,}060 + 12{,}565$
- (C) $h - 1{,}060 = 12{,}565$
- (D) $h = 1{,}060 - 12{,}565$

Use the picture graph for 22–23.

Brett's Basketball Scores

Game 1	4
Game 2	8
Game 3	6
Game 4	2

= 4 points

22. How many fewer points did Brett score in Game 1 than in Game 3?

- (F) 36
- (G) 30
- (H) 16
- (J) 8

23. What multiplication equation compares the number of points Brett scored in Game 2 and Game 4?

- (A) $p \times 8 = 24;\ p = 3$
- (B) $p \times 8 = 32;\ p = 4$
- (C) $p \times 4 = 24;\ p = 6$
- (D) $p \times 4 = 32;\ p = 8$

24. Zack bought 3 pads of drawing paper, 4 charcoal pencils, and 5 color pencils. The pads of drawing paper cost $8 each. The charcoal pencils and color pencils cost $3 each. Which equation shows the total cost of the art supplies?

- (F) $3 \times 8 + 3 \times 4 + 5 = c;\ c = \$41$
- (G) $3 \times 8 + 3 \times (4 + 5) = c;\ c = \$51$
- (H) $3 \times 8 + 3 \times 4 + 5 = c;\ c = \$113$
- (K) $3 \times 8 + 3 \times (4 + 5) = c;\ c = \$297$

25. A store has DVDs on sale. The store has 5 racks of cartoons with 13 in each rack. It has 3 racks of movies with 12 in each rack. There were 25 cartoons sold in the first hour of the sale. Which shows how many cartoons and movies are left?

- (A) $(5 \times 13 + 3 \times 12) - 25 = 56$
- (B) $(5 \times 13 + 3 \times 12) - 25 = 66$
- (C) $(5 \times 13 + 3 \times 12) - 25 = 76$
- (D) $(5 \times 13 + 3 \times 12) - 25 = 86$