

Nebraska State Accountability

Grade 6 Mathematics Practice Test



Nebraska Department of Education 2010

1. Use the bar graph to answer the question.



The graph shows the number of snacks sold at the first 4 games. At which game were the fewest snacks sold?

- A. Game 1
- B. Game 2
- C. Game 3
- D. Game 4
- 2. A family of 2 adults and 3 children went to a movie. The tickets cost \$8 for adults and \$5 for children. Which expression represents the total cost of the tickets?
 - A. 2 + 3 + 8 + 5B. $(5 \cdot 8) + (3 \cdot 2)$ C. $(2 \cdot 8) + (3 \cdot 5)$
 - D. $(3 \cdot 8) + (2 \cdot 5)$

3. Use the parallelogram to answer the question below.



The perimeter of the parallelogram is 28 units. What is the length of side e?

- A. 6 units
- B. 8 units
- C. 12 units
- D. 20 units

4. Use the list of numbers to answer the question below.

22, 25, 14, 11, 23, 27, 46

What is the mode?

- A. 23
- B. 24
- C. 35
- D. No mode

- 5. Mary lives $1\frac{3}{4}$ miles from school. She rode her bicycle to school and back each day for 5 days. Which expression shows how to estimate the number of miles she rode?
 - A. $(5 + 2) \times 2$ B. $5 \times (2 + 2)$ C. $(7 + 2) \times 2$ D. $7 \times (2 + 2)$
- 6. Elizabeth has some stickers. She divides her stickers equally among herself and two friends. Each person gets 4 stickers. Which equation represents the total number, *s*, of stickers?
 - A. s + 3 = 4B. s - 3 = 4C. $\frac{s}{3} = 4$ D. 3s = 4
- 7. Which expression shows a prime factorization?

A. 2 • 9 • 11
B. 2.5 • 7 • 3
C. 1 • 11 • 13
D. 2 • 2 • 2 • 3 • 11

Use the pictures below to answer the question. 8.



6 cm



CORN 7 cm 7 cm

Which box has the greatest volume?

- gift box A.
- jewelry box Β.
- box of popcorn C.
- box of crackers D.

9. Use the picture to answer the question below.



What is the area of the parallelogram?

- A. 5 m^2
- B. 13 m²
- C. 26 m²
- D. 36 m²
- 10. Taylor pays \$5.25 for 0.5 yards of fabric. What is the cost per yard?
 - A. \$1.05
 - B. \$10.05
 - C. \$10.50
 - D. \$105.00

- 11. Which equation represents 36 less than a number, y, is equal to 13?
 - A. y 36 = 13B. 36 - y = 13C. 13 - y = 36D. 36 + y = -13
- 12. Which list of numbers is ordered from least to greatest?
 - A. 167,213, 161,455, 17,400, 11,633
 B. 10,354, 10,600, 104,321, 106,213
 C. 160,233, 171,141, 11,645, 16,703
 D. 12,209, 12,902, 125,466, 125,464

- 13. Mr. Jones rolls a six-sided cube numbered 1, 2, 3, 4, 5, 6. What is the probability he rolls a three?
 - A. $\frac{1}{6}$
 - B. $\frac{1}{5}$ C. $\frac{1}{3}$
 - D. $\frac{1}{2}$
- 14. What is the value of 4x + 9, when x = 4?
 - A. 13
 - B. 17
 - C. 25
 - D. 52

15. Use the table below to answer the question.

Top Speed of Animals		
Animal	Speed (mph)	
cheetah	70	
coyote	43	
greyhound	39	
rabbit	35	
elephant	25	
chicken	9	

The table lists the running speeds of land animals. Which speed is a prime number?

- A. 9 mph
- B. 25 mph
- C. 39 mph
- D. 43 mph
- 16. Which step explains how to find the value of a in 6a = 72?
 - A. add 6 to both sides
 - B. divide both sides by 6
 - C. multiply both sides by 6
 - D. subtract 6 from both sides

- 17. What is the value of p in 24 = 2p?
 - A. p = 4B. p = 8C. p = 12
 - D. p = 24
- 18. Use estimation to answer the question. Which sum is greater than 1?
 - A. $\frac{17}{24} + \frac{13}{21}$ B. $\frac{9}{24} + \frac{10}{21}$ C. $\frac{12}{24} + \frac{9}{21}$ D. $\frac{11}{24} + \frac{8}{21}$

- 19. A tournament has 393 players with 3 players on each team. Which expression shows how to find the number of teams in the tournament?
 - A. 393 + 3
 - B. 393 3
 - C. 393 × 3
 - D. 393 ÷ 3
- 20. Use the diagram to answer the question below.



When folded along the dotted lines, which geometric solid is formed?

- A. cylinder
- B. pyramid
- C. rectangular prism
- D. triangular prism

- 21. What is the value of $5 + 2 \cdot 15 + (12 \cdot 4)$?
 - A. 78
 - B. 83
 - C. 131
 - D. 153

22. Use the chart below to answer the question.

Frequency Chart

outcome	red	blue	white	green
frequency	₩II			1111 1111

Nan randomly takes a marble from a bag, records the color in the chart, and then returns the marble to the bag. She does this 30 times and records her results in the chart each time. The chart shows her results. What is the experimental probability of drawing a white marble?

A.
$$\frac{3}{30}$$

B.
$$\frac{7}{30}$$

C.
$$\frac{9}{30}$$

D. $\frac{11}{30}$

- 23. Altogether, Sonia and Negin have \$27.00. Sonia buys a shirt for \$12.35 and Negin buys a pair of sandals for \$10.11. How much money remains?
 - A. \$4.46
 - B. \$4.54
 - C. \$5.36
 - D. \$5.76

24. Use the coordinate grid below to answer the question.



What is the ordered pair for point F?

- A. (-6, -4)
- B. (-6, 4)
- C. (6, –4)
- D. (6, 4)

Grade 6 Practice Test

Answer Key

Number	Кеу
1	В
2	С
3	А
4	D
5	В
6	С
7	D
8	В
9	D
10	С
11	А
12	В
13	А
14	С
15	D
16	В
17	С
18	А
19	D
20	D
21	В
22	A
23	В
24	A