

Nebraska State Accountability

Grade 7 Mathematics Practice Test



Nebraska Department of Education 2010

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



What are the coordinates of point J?

- A. (0, 3)
- B. (-3, 0)
- C. (3, 0)
- D. (0, -3)
- 2. John eats $\frac{3}{5}$ of a candy bar. What percent of the candy bar does he eat?
 - A. 6%
 - B. 30%
 - C. 35%
 - D. 60%

- 3. A small submarine started its dive at sea level and descended 30 feet per minute. Which integer represents the submarine's depth after seven minutes?
 - A. -210 feet
 - B. -23 feet
 - C. 37 feet
 - D. 210 feet
- 4. Use the coordinate grid below to answer the question.



What is the distance between the points at (0, 1) and (0, 10)?

- A. 8 units
- B. 9 units
- C. 10 units
- D. 11 units

5. Use the table below to answer the question.

Food	Calories
Cheddar cheese, 1 ounce	114
Orange, 1 medium	70
Egg, 1 large	75
Strawberries, 1 serving	45
Pecans, 1/4 cup	185

Which expression represents the number of calories in r oranges and $\frac{1}{4}$ cup of pecans?

- A. 70 + 185
- B. 75*r* + 185
- C. 70*r* + 185
- D. 75 + 185
- 6. Which represents the value of s in $s + 12 \ge 100$?
 - A. *s* > 88
 - B. *s* < 88
 - C. $s \ge 88$
 - D. $s \leq 88$
- 7. What is 6.43×10^7 in standard notation?
 - A. 643×10^5
 - B. 64,300,000
 - C. 6,430,000,000
 - D. 64.3×10^{10}

- 8. Pat has his own lawn mowing service. The maximum Pat charges to mow a lawn is \$20. Which inequality represents the amount Pat could charge, *c*, to mow a lawn?
 - A. *c* > 20
 - B. $c \ge 20$
 - C. c = 20
 - D. $c \leq 20$
- 9. The attendance at three concerts was 876, 647, and 856. Which expression shows how to estimate the total attendance at the concerts?
 - A. 800 + 600 + 800
 - B. 900 + 700 + 900
 - C. 900 + 600 + 900
 - D. 1,000 + 700 + 900











11. What is 35% of 80?

- A. 28
- B. 45
- C. 115
- D. 2,800

12. Use the set of numbers below to answer the question.

35	20	30	25	20
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What is the median of the list of numbers?

- A. 30
- B. 20
- C. 25
- D. 26
- 13. Which rational number is the greatest?
 - A. 0.55
 - B. 0.6
 - C. $\frac{9}{20}$
 - D. $\frac{1}{2}$

14. Mikel walks down 5 flights of stairs. Each flight has 8 steps. Which describes Mikel's descent?

- A. -5 + 8 = 3
- B. (-5) + (-8) = -13
- C. (-5)(-8) = 40
- D. (-5)(8) = -40

15. Use the picture below to answer the question.



One marble is drawn at random from each bag. What is the probability that neither marble is blue?

A. $\frac{1}{16}$ B. $\frac{3}{8}$ C. $\frac{1}{2}$ D. $\frac{3}{4}$

- 16. Middle-school students sold cookies in packages of 12. On the first day, they sold x packages. On the second day, they sold twice as many packages as on the first day. Which expression shows the number of cookies they sold on the second day?
 - A. 12(2*x*)
 - B. 12(x + 2)
 - C. 12(x 2)
 - D. $\frac{12x}{2}$
- 17. Use the coordinate grid below to answer the question.



What is the circumference of the circle?

- A. 12.56 units
- B. 25.12 units
- C. 50.24 units
- D. 251.2 units

Color	Tally	Frequency
red	111 111 111 111 111 111 111	27
green	1741 1741 1741 1741	20
blue		28
orange	<u>1111 1111 1111 1111 1111 1111 1111 11</u>	25

18. Use the chart below to answer the question.

Students are given a colored spinner divided equally between red, green, blue, and orange sections. Students spin the spinner 100 times and collect the data in a chart. Which statement reflects the

relationship between the experimental and theoretical probability of the spinner landing on green?

Spinner Experiment

There is not enough information to calculate experimental probability. A.

- The experimental probability is greater than theoretical probability. Β.
- C. The experimental probability and theoretical probability are equal.
- D. The theoretical probability is greater than the experimental probability.
- 19. Carmen has saved \$24 to buy a DVD player that costs \$96. She plans on saving \$12 each week. The equation 12w + 24 = 96 can be used to find the number of weeks, w, when she will have enough money to buy the DVD player. How many weeks before Carmen has enough for the DVD player?
 - A. 6 weeks
 - 8 weeks Β.
 - C. 10 weeks
 - D. 12 weeks

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



What transformation of trapezoid ACDB will create trapezoid STUR?

- A. dilation
- B. rotation
- C. reflection
- D. translation

21. Use the table below to answer the question.

Year	Median House Price
1970	\$23,400
1975	\$39,300
1980	\$64,600
1985	\$84,300
1990	\$122,900
1995	\$133,900
2000	\$169,000

Median House Prices (1970 - 2000)

Which describes the trend of the data in the table?

- A. always decreasing
- B. decreasing followed by increasing
- C. always increasing
- D. increasing followed by decreasing
- 22. The temperature is 8° F. As a cold front moves in, the temperature drops 6° F per hour. What is the temperature at the end of 3 hours?
 - A. −26° F
 - B. -10° F
 - C. 5° F
 - $D. \quad 26^\circ \ F$

23. Use the graph below to answer the question.



A shopper spent \$100 at the store. How many dollars did the shopper spend on snacks?

- A. \$10
- B. \$18
- C. \$30
- D. \$42

24. What is the value of the expression 8x - 10 when x = 5?

- A. 3
- B. 4
- C. 30
- D. 50

Grade 7 Practice Test

Answer Key

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