

Nebraska State Accountability

Grade 5 Mathematics Practice Test



Nebraska Department of Education 2010

Directions:

On the following pages are multiple-choice questions for the Grade 5 Practice Test, a practice opportunity for the *Nebraska State Accountability–Mathematics* (NeSA-M).

Each question will ask you to select an answer from among four choices.

For all questions:

- Read each question carefully and choose the best answer.
- You may use scratch paper to solve the problems.
- The Mathematics Reference Sheet is provided in the back of the test booklet. You may refer to this page any time during the test.
- You may not use a calculator on this test.
- Be sure to answer ALL the questions.

Remember only one of the answers provided is the correct response.

- 1. Evan wants to measure the length of his room. Which unit of measure is appropriate to measure the length of his room?
 - A. centimeter
 - B. foot
 - C. inch
 - D. millimeter

2. What is
$$\frac{3}{9}$$
 in simplest form?
A. $\frac{1}{3}$
B. $\frac{1}{2}$
C. $\frac{3}{6}$
D. $\frac{6}{18}$

- 3. Mrs. Perkins makes study guides for her class of 21 students. She uses 252 sheets of paper. How many sheets of paper are in each study guide?
 - A. 12 sheets
 - B. 231 sheets
 - C. 273 sheets
 - D. 5,292 sheets

4. Use the rectangle below to answer the question.



What is the area of the rectangle?

- A. 12 square meters
- B. 22 square meters
- C. 44 square meters
- D. 85 square meters
- 5. Which equation shows how to multiply $6 \times 5 \times 3$ using the associative property?
 - A. $6 \times 5 \times 3 = 3 \times 5 \times 6$
 - B. $(6 \times 3) + 5 = 6 \times (3 + 5)$
 - C. $(6 \times 5) \times 3 = 6 \times (5 \times 3)$
 - D. $(6 \times 5) + (6 \times 3) = (6 \times 3) + (6 \times 5)$

6. Which picture shows 180° of a circle?



- 7. Each time John goes to the movies he spends 7.00. Which expression shows how much he spends after going to the movies *t* times?
 - A. t + \$7.00
 - B. *t* \$7.00
 - C. $$7.00 \times t$
 - D. \$7.00 t

- 8. What is 92.53 ÷ 10?
 - A. 0.9253
 - B. 9.253
 - C. 92.53
 - D. 925.3
- 9. In the expression 15 n, which value of *n* results in the greatest difference?
 - A. n = 0
 - B. *n* = 5
 - C. *n* = 10
 - D. *n* = 15
- 10. What is the value of w in the equation 116 w = 95?
 - A. *w* = 19
 - B. *w* = 21
 - C. w = 210
 - D. *w* = 211

- 11. What is the standard form of twenty-one and six hundred thirty-four thousandths?
 - A. 21.60034
 - B. 21.6034
 - C. 21.634
 - D. 2,160,034

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



What are the coordinates of Point A?

- A. (11, 6)
- B. (12, 7)
- C. (6, 11)
- D. (7, 12)

13. Use the spinner below to answer the question.



What are all the possible outcomes for the spinner?

- A. red, blue, red, green
- B. yellow, red, blue, red
- C. red, blue, yellow, green
- D. yellow, red, blue, yellow

14. Which is the correct sum?

	2.34	
+	1.7	

- A. 2.51
- B. 3.04
- C. 3.14
- D. 4.04

15. Use the table below to answer the question.

toothpaste	\$3.99
bread	\$2.45
milk	\$2.69
apples	\$3.10
cereal	\$4.89

Ashley's Grocery List

Ashley goes to the grocery store to buy each of the items on her list. Ashley rounds the cost of each item to the nearest dollar. What is the estimated total cost of these items?

- A. \$15.00
- B. \$16.00
- C. \$17.00
- D. \$18.00
- 16. Which percent equals $\frac{1}{4}$?
 - A. 14%
 - B. 25%
 - C. 41%
 - D. 52%

17. Use the expression below to answer the question.

 53×24

How can the distributive property be used to solve this expression?

- A. $(50 + 20) \times (3 + 4)$
- B. $(5 \times 2) + (3 \times 4)$
- C. $(53 + 4) \times (53 + 2)$
- D. $(53 \times 20) + (53 \times 4)$
- 18. Which list is in order from least to greatest?
 - A. 1,000; 1,010; 1,009
 B. 1,010; 1,011; 1,100
 C. 1,100; 1,010; 1,001
 D. 1,010; 1,100; 1,001

- 19. Which is a composite number?
 - A. 5
 - B. 7
 - C. 19
 - D. 21
- 20. What is $3.8 \times 10?$
 - A. 0.38
 - B. 3.80
 - C. 38
 - D. 380

21. Use the graph below to answer the question.



Which circle graph could represent the information in the bar graph?



22. Use the picture below to answer the question.



How many faces does the prism have?

- A. 3 faces
- B. 4 faces
- C. 5 faces
- D. 6 faces
- 23. Use the bar graph below to answer the question.



A teacher asked the fifth graders about their favorite activities. What is the total number of fifth graders represented on the graph?

- A. 10
- B. 25
- C. 65
- D. 80

- 24. What is the value of 12 (3 + 5)?
 - A. 4
 - B. 10
 - C. 14
 - D. 20





Shape	Area	Perimeter		Key
Rectangle	$A = l \times w$	P = 2l + 2w	l = length	s = side length
Square	$A = s \times s$	P = s + s + s + s	w = width	

Standard Units	Metric Units			
Conversions – Length				
1 foot (ft) = 12 inches (in.)	1 centimeter (cm) = 10 millimeters (mm)			
1 yard (yd) = 3 feet (ft) = 36 inches (in.)	1 meter (m) = 100 centimeters (cm)			
1 mile (mi) = 1,760 yards (yd) = 5,280 feet (ft)	1 meter (m) = $1,000$ millimeters (mm)			
	1 kilometer (km) = $1,000$ meters (m)			
Conversions – Volume				
1 cup = 8 fluid ounces (fl oz)	1 liter (l) = $1,000$ milliliters (ml)			
1 pint (pt) = 2 cups	1 liter (1) = 1,000 cubic centimeters (cu. cm)			
1 quart (qt) = 2 pints (pt)				
1 gallon (gal.) = 4 quarts (qt)				
Conversions – Weight/Mass				
1 pound (lb) = 16 ounces (oz)	1 gram (g) = 1,000 milligrams (mg)			
1 ton = 2,000 pounds (lb)	1 kilogram (kg) = 1,000 grams (g)			

Grade 5 Practice Test

Answer Key

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