

Nebraska State Accountability

**Grade 5
Mathematics
Practice Test**

Name:

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.

Only one of the answers provided is the correct response.

1. What is the value of the expression $54 - (12 \div 2)$?
 - A. 21
 - B. 30
 - C. 33
 - D. 48

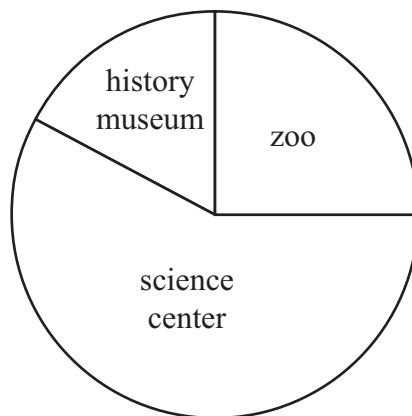
2. Which list is in order from least to greatest?
 - A. 8.120, 8.012, 8.201, 8.210
 - B. 8.012, 8.120, 8.210, 8.201
 - C. 8.012, 8.120, 8.201, 8.210
 - D. 8.120, 8.201, 8.012, 8.201

3. What is the greatest common factor of 18 and 24?
 - A. 2
 - B. 3
 - C. 4
 - D. 6

4. What is the quotient of $47.1 \div 5$?
 - A. 0.942
 - B. 9.42
 - C. 94.2
 - D. 942

5. Use the circle graph below to answer the question.

Field Trip Survey Results



The circle graph shows the results of a survey of 300 fifth-grade students to find out where they would like to go for their class field trip. How many students would like to go to the zoo?

- A. 75
B. 90
C. 100
D. 125
6. The walking club at school walked $3\frac{1}{2}$ miles the first week and $3\frac{1}{4}$ miles the second week. How much farther did the students walk the first week than the second week?
- A. $\frac{1}{4}$ mile
B. $\frac{1}{2}$ mile
C. $6\frac{2}{6}$ miles
D. $6\frac{3}{4}$ miles

7. Anna eats 30% of a pizza that is cut into 10 pieces that are the same size. What fraction of the pizza does she eat?

A. $\frac{1}{5}$

B. $\frac{3}{10}$

C. $\frac{1}{3}$

D. $\frac{3}{7}$

8. Which fractions have a common denominator of 24?

A. $\frac{1}{20}$ and $\frac{1}{4}$

B. $\frac{1}{14}$ and $\frac{1}{24}$

C. $\frac{1}{3}$ and $\frac{1}{8}$

D. $\frac{2}{3}$ and $\frac{6}{7}$

9. What is $10\frac{2}{3} - 8\frac{1}{7}$?

A. $2\frac{1}{10}$

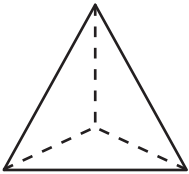
B. $2\frac{3}{21}$

C. $2\frac{1}{4}$

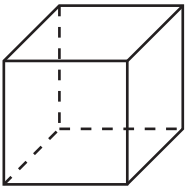
D. $2\frac{11}{21}$

10. Which solid object has 4 faces, 6 edges, and 4 vertices?

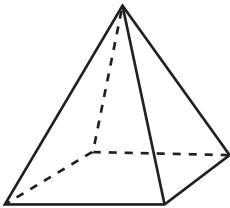
A.



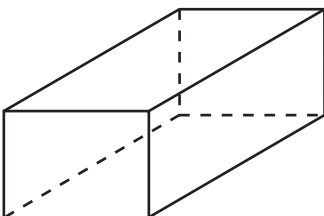
B.



C.

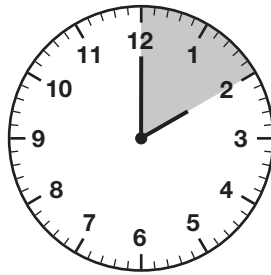


D.



11. Five pounds of apples cost \$5.78. Mary needs 10 pounds of apples to make applesauce. Which estimate is closest to the cost of 10 pounds of apples?
- A. \$10.00
 - B. \$11.00
 - C. \$12.00
 - D. \$13.00

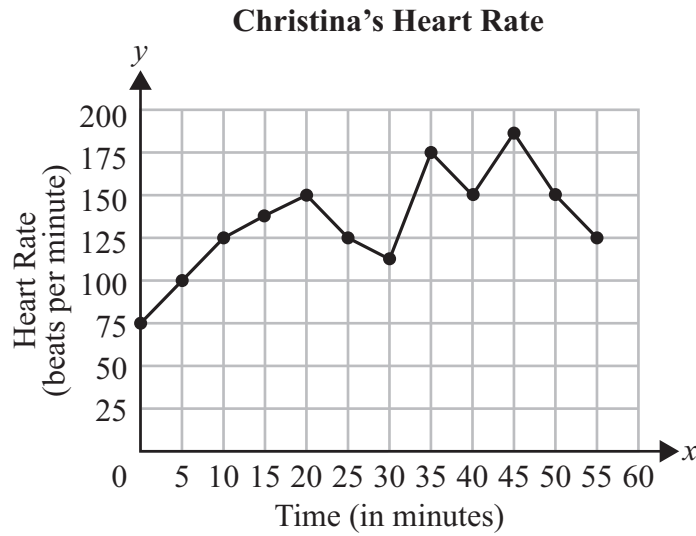
12. Use the picture below to answer the question.



What is the measure, in degrees, of the angle formed by the hands of the clock?

- A. 30°
- B. 45°
- C. 60°
- D. 90°

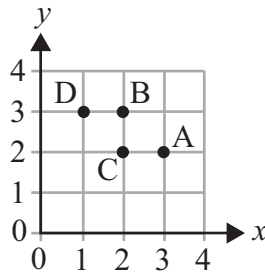
13. Use the graph to answer the question.



The line graph shows Christina's heart rate at 5-minute intervals after she starts exercising. During which 5-minute interval did Christina's heart rate increase the most?

- A. 15 minutes to 20 minutes
 - B. 30 minutes to 35 minutes
 - C. 40 minutes to 45 minutes
 - D. 45 minutes to 50 minutes
14. Which metric unit is the most appropriate to measure the length of a classroom?
- A. centimeter
 - B. kilometer
 - C. meter
 - D. millimeter

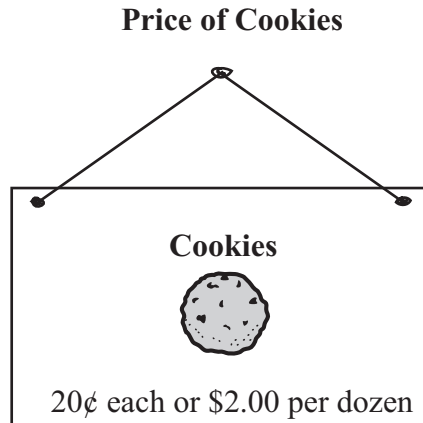
15. Use the coordinate grid below to answer the question.



Which point has the coordinates (2, 3)?

- A. point A
 - B. point B
 - C. point C
 - D. point D
16. What is the value of b when $b + 1.4 = 241$?
- A. 23.96
 - B. 227
 - C. 239.6
 - D. 240.86
17. Derek uses the distributive property to find 24×7 . Which statement describes how he could find 24×7 ?
- A. multiply 7 by 20, then add 4
 - B. multiply 7 by 4, then add 20
 - C. multiply 20 by 7, then add the product of 4 and 7
 - D. multiply 20 by 4, then add the product of 2 and 7

18. Use the picture below to answer the question.



Trisha wants to buy 1 dozen cookies (12 cookies). What is the difference in price between buying 12 cookies individually and buying them by the dozen?

- A. \$0.20
 - B. \$0.40
 - C. \$1.00
 - D. \$1.20
19. Which numbers between 10 and 17 are prime?
- A. 11, 13
 - B. 11, 13, 15
 - C. 12, 14, 16
 - D. 12, 15

20. A bag contains the 26 letters of the alphabet on individual tiles. What is the probability of randomly drawing an A or Z out of the bag?

- A. $\frac{1}{26}$
- B. $\frac{2}{26}$
- C. $\frac{2}{24}$
- D. $\frac{13}{26}$

21. Use the picture below to answer the question.

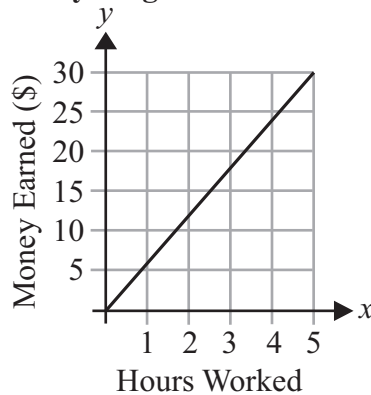


The 4 shapes are placed into a bag. Sam removes 2 of the shapes from the bag at the same time. Which outcome could NOT be the shapes Sam removed from the bag?

- A. triangle and circle
 - B. rectangle and rectangle
 - C. rectangle and circle
 - D. triangle and triangle
22. Jake uses 1.5 gallons of gasoline each hour he mows lawns. Which number shows the amount of gasoline he uses in 3.5 hours?
- A. 3.25
 - B. 3.50
 - C. 5.25
 - D. 5.50

23. Use the line graph below to answer the question.

Hourly Wages for Summer Jobs



Which table matches the information on the graph?

A. **Hourly Wages for Summer Jobs**

Hours Worked	1	2	3	4	5
Money Earned	\$6	\$12	\$18	\$24	\$30

B. **Hourly Wages for Summer Jobs**

Hours Worked	1	2	3	4	5
Money Earned	\$5	\$10	\$20	\$25	\$30

C. **Hourly Wages for Summer Jobs**

Hours Worked	1	2	3	4	5
Money Earned	\$5	\$10	\$15	\$20	\$25

D. **Hourly Wages for Summer Jobs**

Hours Worked	1	2	3	4	5
Money Earned	\$7	\$14	\$21	\$28	\$35

24. When $q = 3.5$, what is $8.5 - 4.3 - q$?
- A. 0.7
 - B. 1.3
 - C. 7.7
 - D. 9.3
25. The area of a square room is 16 square feet. What is the length and the width of the room?
- A. 4 feet and 4 feet
 - B. 6 feet and 2 feet
 - C. 8 feet and 2 feet
 - D. 10 feet and 6 feet
26. Which number is equivalent to 7.810?
- A. seven and eighty-one
 - B. seven and eight hundred ten
 - C. seven and eighty-one hundredths
 - D. seven and eighty-one thousandths

27. Use the equation below to answer the question.

$$(6 + 4) + 7 = 6 + (b + 7)$$

What value of b makes this equation correct?

- A. 1
- B. 4
- C. 10
- D. 17

NeSA-M Grade 5 Reference Sheet



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

Key	
l = length	s = side length
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 (l) = 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
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Answer Key**

1	D
2	C
3	D
4	B
5	A
6	A
7	B
8	C
9	D
10	A
11	C
12	C
13	B
14	C
15	B
16	C
17	C
18	B
19	A
20	B
21	D
22	C
23	A
24	A
25	A
26	C
27	B

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