# NeSA <br> Mathematics 

# Nebraska State Accountability 

## Grade 6

Mathematics
Practice Test

Name:

1. Krista bought jeans for $\$ 27.50$, a shirt for $\$ 11.75$, and shoes for $\$ 35.25$. Which expression shows how to estimate the total amount Krista spent?
A. $\$ 20+\$ 10+\$ 30$
B. $\$ 20+\$ 20+\$ 30$
C. $\$ 30+\$ 10+\$ 40$
D. $\$ 30+\$ 20+\$ 40$
2. A plant container in the shape of a rectangular prism measures 12 inches by 9 inches by 8 inches. How much soil is needed to fill the plant container?
A. 684 in. ${ }^{3}$
B. 784 in. ${ }^{3}$
C. 854 in. ${ }^{3}$
D. 864 in. $^{3}$
3. Which value's prime factorization is $2 \cdot 3^{2} \cdot 5$ ?
A. 13
B. 30
C. 60
D. 90
4. Ben, Tracey, and Tran spent a total of $\$ 15$ to go skating. They each rented skates at the park for $n$ dollars. Which equation represents the amount each person spent?
A. $2 n=15$
B. $3 n=15$
C. $15 n=2$
D. $15 n=3$
5. What is the value of $\frac{x}{3}$ when $x=42$ ?
A. 14
B. 39
C. 45
D. 126
6. Which expression represents 16 less than $m$ ?
A. $16+m$
B. $16-m$
C. $m \div 16$
D. $m-16$
7. Use the equation below to answer the question.

$$
12+x=16 \frac{1}{4}
$$

What value of $x$ correctly completes the equation?
A. $3 \frac{3}{4}$
B. $4 \frac{1}{4}$
C. $27 \frac{3}{4}$
D. $28 \frac{1}{4}$
8. Maria used 64 feet ( ft ) of fencing to construct a square dog pen. How long is each side of the pen?
A. 8 ft
B. 12 ft
C. 16 ft
D. 32 ft
9. Which step explains how to find the value of $y$ in $y+5=13$ ?
A. Add 5 to both sides.
B. Subtract 5 from both sides.
C. Multiply both sides by 5 .
D. Divide both sides by 5 .
10. What is the value of $3+4 \cdot 5-1$ ?
A. 11
B. 22
C. 34
D. 59
11. Ben's quiz scores are $80,90,95,80$, and 100 . What is his median quiz score?
A. 80
B. 90
C. 95
D. 100
12. Which statement is true?
A. $-14>-28$
B. $-25>1$
C. $-12>-10$
D. $-15>0$
13. Use the table below to answer the question.

Tommy's Results

| Heads | Tails |
| :---: | :---: |
| 30 | 20 |

Tommy flipped a coin 50 times and recorded the results in a table. What is the experimental probability of the coin landing heads-up?
A. $\frac{20}{50}$
B. $\frac{25}{50}$
C. $\frac{30}{50}$
D. $\frac{20}{30}$
14. What is another way to write 1,064 ?
A. $\left(1 \times 10^{2}\right)+\left(6 \times 10^{1}\right)+\left(4 \times 10^{0}\right)$
B. $\left(1 \times 10^{3}\right)+\left(6 \times 10^{1}\right)+\left(4 \times 10^{0}\right)$
C. $\left(1 \times 10^{3}\right)+\left(6 \times 10^{2}\right)+\left(4 \times 10^{1}\right)$
D. $\left(1 \times 10^{4}\right)+\left(6 \times 10^{2}\right)+\left(4 \times 10^{1}\right)$
15. Use the picture to answer the question.


Which solid figure does the net represent?
A. cone
B. cylinder
C. triangular prism
D. rectangular prism
16. Use the coordinate grid below to answer the question.


Which point is described by the ordered pair ( 3,4 )?
A. point R
B. point S
C. point T
D. point U
17. A middle school purchased 600 journals. The company shipped 24 journals per box. Which expression shows how to find the number of boxes used to ship the 600 journals?
A. $600+24$
B. $600-24$
C. $600 \times 24$
D. $600 \div 24$
18. Four friends purchase a video game for $\$ 56.28$. The total cost for the game is divided equally between the four friends. How much does each friend pay?
A. $\quad \$ 14.00$
B. $\$ 14.07$
C. $\$ 14.08$
D. $\$ 14.70$
19. Susie is $62 \frac{1}{2}$ inches tall at the end of the year. She grew $\frac{3}{4}$ of an inch during the school year. How tall was Susie at the beginning of the year?
A. $61 \frac{1}{4}$ inches
B. $61 \frac{1}{2}$ inches
C. $61 \frac{3}{4}$ inches
D. $62 \frac{1}{4}$ inches
20. Use the spinner below to answer the question.


Which color has a theoretical probability of $\frac{1}{4}$ ?
A. red
B. blue
C. yellow
D. green
21. Use the table below to answer the question.


Tran and Stacy go to The Burger Spot for lunch. Each person ordered one cheeseburger, one order of French fries, and one drink. Tran also ordered a hamburger. Which expression represents the total cost of their order?
A. $2(\$ 3+\$ 2+\$ 1.50+\$ 0.75)$
B. $2(\$ 3+\$ 1.50+\$ 0.75)$
C. $\$ 3+\$ 2+\$ 1.50+\$ 0.75$
D. $2(\$ 3+\$ 1.50+\$ 0.75)+\$ 2$
22. Which value correctly completes the number sentence $15.3-6.74=$ $\qquad$ ?
A. 8.54
B. 8.56
C. 8.64
D. 8.66
23. Use the line graph to answer the question below.

Average Monthly Temperatures for Chicago and Dallas


| Key |
| :--- |
| $\ldots$ Chicago |
| $\rightarrow$ Dallas |

The line graph shows the average monthly temperatures for Chicago and Dallas for six months. Which two months show an average temperature less than $50^{\circ} \mathrm{F}$ for both cities?
A. 5 and 6
B. 3 and 4
C. 2 and 3
D. 1 and 2
24. Jaivon built a rectangular fence along the border of a new playground. He used 48 feet of fencing. One side of the playground is 10 feet long. What is the area of the playground?
A. 96 square feet
B. 140 square feet
C. 192 square feet
D. 320 square feet
Grade 6
Mathematics Practice Test
Answer Key

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

