# TEST NAME: Fall SOY Checkpoint Grade 6 Math Content TEST ID: 29 <br> GRADE: 06-07 <br> SUBJECT: Mathematics <br> TEST CATEGORY: Start of Year Checkpoint 

## 08/10/20, Fall SOY Checkpoint Grade 6 Math Content

Student:
Class:
Date:

## Instructions

The Grade 6 Math test has two subparts. Each subpart contains different types of questions. To begin the test, click the "Next" arrow button at the top.

## Read the passage - 'VH984282_directions' - and answer the question below:

VH984282_directions
Subpart 1 of this test contains different types of assessment questions in Grade 6 Math. You may make notes on scratch paper or use the Notepad tool within the online test. Make sure you answer all the questions. You MAY NOT use a calculator in Subpart 1 of this test.


1. Which expression is equivalent to the sum of 2 times $y$ and 15 ?

A $2 y \cdot 15$
B. $2 y+15$
C. $2+15 y$
D. $2+y+15$
2. Maria buys $x$ books. Each book costs $\$ 5$.

Which expression represents the amount of money Maria spends to buy $x$ books?
A $5 x$
B. $5+x$
C. $\frac{5}{x}$
D. $\frac{x}{5}$
3. A truck travels 90 miles on 6 gallons of gas.

What is the rate the truck travels in miles per gallon?
A 6
B. 15
C. 90
D. 540
4. Casey earns money, $m$, for doing chores. He puts that money with $\$ 5.50$ he has in his pocket. Casey now has a total of $\$ 35.50$.
Which equation represents his total amount of money?
A $\quad m+5.50=35.50$
B. $\quad 5.50+35.50=m$
C. $\quad 35.50+m=5.50$
D. $\quad 5.50 \mathrm{~m}=35.50$
5. Drew has a job making pizzas. He can make 1 pizza in 7.5 minutes. Which equation can be used to find $m$, the number of minutes it takes Drew to make $p$ pizzas?

A $p=\frac{7.5}{m}$
B. $m=7.5 p$
C. $m=\frac{p}{7.5}$
D. $p=7.5 \mathrm{~m}$
6. An equation is given.
$\frac{1}{4} \div x=\frac{2}{12}$
What value of $x$ makes the equation true?
A $\frac{3}{2}$
B. $\frac{2}{3}$
C. $\frac{1}{8}$
D. $\frac{1}{12}$
7. Which expressions are equal to 16 when $x=4$ ?

Select the three correct answers.
Pick up to 5 answers.
A. $2 x \div 0.5$
B. $4 x \cdot x-3$
C. $\frac{x^{3}}{4}$
D. $5 x-16 \div x$
E. $\frac{1}{2} x+8$
8. It takes Alia 7 minutes to run one mile.

Which equation can be used to show the relationship between Alia's number of miles, $m$, and the total time of her run, $t$ ?

A $\quad 7 t=m$
B. $7 m=t$
C. $7+m=t$
D. $m-7=t$
9. Three children divide $\frac{2}{3}$ of a pizza equally. Which fraction represents the part of the whole pizza each child receives?
A $\frac{1}{2}$
B. $\frac{1}{3}$
C. $\frac{2}{9}$
D. $\frac{6}{3}$
10. Abe earns $\$ 30.00$ for raking his neighbor's leaves. He bought lunch and has $\$ 22.75$ left. The equation $x+22.75=30.00$ can be used to determine $x$, the amount of money, in dollars, Abe spent for lunch.
Which value of $x$ represents the amount of money, in dollars, Abe spent on lunch?
A $x=7.25$
B. $x=7.75$
C. $x=8.25$
D. $x=8.75$
11. Julie paid $\$ 18$ for 6 notebooks. How much did each notebook cost?

A $\$ 0.33$
B. $\$ 3.00$
C. $\$ 6.00$
D. $\$ 12.00$
12. What is the value of the expression $2+x^{2} \cdot 5$ when $x=3$ ?

A 125
B. 55
C. 47
D. 32

Read the passage - 'VH986378_directions' - and answer the question below:
VH986378_directions
Subpart 2 of this test contains different types of assessment questions in Grade 6 Math. You may make notes on scratch paper or use the Notepad tool within the online test. Make sure you answer all the questions. You MAY use a calculator in Subpart 2 of this test.

13. A department store sold $20 \%$ of the dresses they had in stock. After the sale they had 60 dresses left.
What was the original number of dresses before the sale?
A 48
B. 72
C. 75
D. 80
14. The graph shows the relationship between the time, $x$, and the distance, $y$, of a running grizzly bear.

Running Grizzly Bear


Which equation shows the relationship between $x$ and $y$ that is represented by the graph?

A $y=50 \div x$
B. $y=50 x$
C. $x+50=y$
D. $51-y=x$
15. What is the unit price of a granola bar if 8 granola bars cost $\$ 4.16$ ?

A $\$ 0.42$
B. $\$ 0.52$
C. $\$ 1.92$
D. $\$ 5.20$
16. Benny uses $\frac{2}{5}$ gallon of gas to mow his entire lawn one time.

What is the maximum number of times Benny can mow his entire lawn with $3 \frac{1}{2}$ gallons of gas?

A 6
B. 7
C. 8
D. 9
17. What percent of 400 is 75 ?

A $5.33 \%$
B. $18.75 \%$
C. $25 \%$
D. $53 \%$
18. The area of Natalie's new bedroom rug is $3 \frac{3}{4}$ square feet. The width of the rug is $2 \frac{1}{2}$ feet. What is the length of Natalie's rug? Select all correct answers.

Pick up to 5 answers.
A $\frac{2}{3}$
B. $\frac{3}{2}$
C. $1 \frac{1}{2}$
D. $2 \frac{1}{2}$
E. $3 \frac{1}{2}$
19. Of the 220 tickets available for a school play, $45 \%$ have been sold.

What is the number of tickets that have sold?

A 99
B. 175
C. 489
D. 990
20. Which expression is equivalent to $3 y+6$ ? Select two correct answers.

Pick up to 2 answers.
A. $y^{2}+2 y+6$
B. $3(y+6)$
C. $5 y+1-2 y+5$
D. $(y+3)+6$
E. $3(y+2)$
21. Marcus is making a ratio table to use when mixing pints of paint colors. He will use this table to mix an identical color.

## Color A (pints)

## Color B (pints)

| 5 | 8 |
| :---: | :---: |
| 10 | $?$ |
| 15 | 24 |
| 20 | 32 |

What is the missing value in the ratio table?
A. 13
B. 16
C. 18
D. 19
22. Select all of the values of $x$ that make the inequality $4 x \geq 8$ true.

## Pick up to 5 answers.

A 0
B. 1
C. 2
D. 3
E. 4
23. One type of soft drink contains 9.3 teaspoons of sugar per can.

Which equation can be used to show the relationship between the number of cans of soft drink, $c$, and the total number of teaspoons of sugar, $s$ ?

A $9.3 s=c$
B. $\quad 9.3 c=s$
C. $s+9.3=c$
D. $\frac{c}{9.3}=s$
24. There are 15 boys and 10 girls in Ms. Rogers' class. What is the ratio of boys to girls?

A $2: 3$
B. $2: 5$
C. $3: 2$
D. $3: 5$
25. Suzy is taking a class at the community college. The class will meet for a total of $18 \frac{3}{4}$ hours. The class will meet once a week for $1 \frac{1}{4}$ hours. For how many weeks will the class meet?

A 23
B. 20
C. 18
D. 15

