## Tennessee Comprehensive Assessment Program



## Math Grade 6 Item Release




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## Metadata- Math

Items

| Page <br> Number | UIN | Grade | Item Type | Key | DOK | TN <br> Standards | Calculator |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | TN0018329 | 06 | MC | D | 2 | 6.SP.A. 2 | Y |
| 5 | TN0022364 | 06 | MC | A | 2 | 6.G.A. 4 | Y |
| 6 | TN0025844 | 06 | MC | C | 2 | 6.NS.B. 4 | Y |
| 7 | TN0069107 | 06 | MS | A, D | 1 | 6.EE.A. 4 | N |
| 8 | TN0069145 | 06 | MC | D | 2 | 6.EE.B. 5 | Y |
| 9 | TN0069158 | 06 | MC | C | 1 | 6.EE.B. 8 | Y |
| 10 | TN0069169 | 06 | MS | B, D | 2 | 6.NS.B. 4 | N |
| 11 | TN0069189 | 06 | MC | C | 2 | 6.NS.C.7c | N |
| 12 | TN0069195 | 06 | MC | B | 1 | 6.RP.A. 2 | Y |
| 13 | TN0069204 | 06 | MC | D | 2 | 6.RP.A.3c | N |
| 14 | TN0069220 | 06 | MS | A, C | 2 | 6.SP.B.5c | Y |
| 15 | TN0069269 | 06 | MC | C | 2 | 6.G.A. 1 | Y |
| 16 | TN175400 | 06 | MC | A | 3 | 6.NS.A. 1 | Y |
| 17 | TN175527 | 06 | MC | A | 2 | 6.EE.C.9a | N |
| 18 | TN191936 | 06 | MC | C | 2 | 6.EE.A.2a | Y |

## Metadata Definitions:

| UIN | Unique letter/number code used to identify the item. |
| :--- | :--- |
| Grade | Grade level or Course. |
| Item Type | Indicates the type of item. MC= Multiple Choice; MS= Multiple Select |
| Key | Correct answer. This may be blank for constructed response items where students <br> write or type their responses. |
| DOK | Depth of Knowledge (cognitive complexity) is measured on a <br> three-point scale. <br> $1=$ Recall or simple reproduction of information; <br> $2=$ Skills and concepts: comprehension and processing of text; <br> $3=$ Strategic thinking, prediction, elaboration. |
| TN Standards | Primary educational standard assessed. |
| Calculator | Y for items that permit calculator use. |

TN0018329_4
00. The data shown will be placed on a dot plot.

Which statement best describes the shape of the distribution?

$$
7,9,10,10,13,16,17,17,18,19,19,19,19,20,20,20,20
$$

A. The data will be fairly evenly distributed.
B. The data will be clustered to the left.
C. The data will be clustered in the center.
D. The data will be clustered to the right.

TN0022364_1
00. The net of a square pyramid is shown.


What is the surface area, in square units, of the square pyramid formed by folding the net?
A. 84
B. 96
C. 120
D. 132

TN0025844_3
00. For which pair of numbers is the least common multiple the same as the product of the two numbers?
A. 6 and 8
B. 12 and 4
C. 11 and 6
D. 4 and 8

TN0069107_1,4
00. Which expressions are equivalent to $6+x+10 x$ ?

Select the two that are equivalent.
A. $2(5 x+3)+x$
B. $2(5 x+3)$
C. $2 x(3+5)$
D. $11 x+6$
E. $16 x$

TN0069145_4
00. Which inequality is true when $x=0.5$ and $y=5$ ?
A. $4 x y \geq 11.5$
B. $9 y+x>45.5$
C. $y-2 x<3$
D. $7 x y \leq 18$

TN0069158_3
00. The Math Club wants to earn at least $\$ 50$ in order to attend a competition by selling candy bars.

- The club spends $\$ 15$ to buy candy bars to sell.
- The club will sell each candy bar for $\$ 1$.

Which inequality can the club use to find $x$, the number of candy bars they need to sell in order to meet their goal?
A. $x-15 \leq 50$
B. $x+15 \leq 50$
C. $x-15 \geq 50$
D. $x+15 \geq 50$

TN0069169_2,4
00. Select the two expressions equivalent to $(56+72)$.
A. $9(6+8)$
B. $8(7+9)$
C. $3(18+22)$
D. $4(14+18)$
E. $4(14+72)$

TN0069189_3
00. Which statement is true about the numbers represented by the points on the number line?

A. Point $X$ has a greater absolute value than point $W$.
B. Point $Y$ has a greater absolute value than point $X$.
C. Point $W$ has the greatest absolute value of the points on the number line.
D. Point $Z$ has the greatest absolute value of the points on the number line.

TN0069195_2
00. Which statement correctly describes a unit rate?
A. Emily pays $\$ 1$ for 5 drinks. The unit rate is $\$ 5$ per drink.
B. Alan pays $\$ 8$ for 4 pencils. The unit rate is $\$ 2$ per pencil.
C. Karen pays $\$ 12$ for 3 muffins. The unit rate is $\$ 15$ per muffin.
D. Roberto pays $\$ 24$ for 12 gallons of gas. The unit rate is $\$ 12$ per gallon.

TN0069204_4
00. There are 500 students at a middle school. Of these students, 350 will attend a dance.

What percentage of the students at this school will attend the dance?
A. $15 \%$
B. $30 \%$
C. $35 \%$
D. $70 \%$

TN0069220_1,3
00. The list shows the number of points a football team scored each game for 16 games.

$$
0,0,0,0,0,10,15,15,15,15,20,20,20,30,30,45
$$

Which two statements about this list are true?
A. The median is greater than the mean.
B. The mean is greater than the median.
C. The range is greater than the median.
D. The median is greater than the range.
E. The range, mean, and median are all the same value.

TN0069269_3
00. The figure shows the dimensions of a closet floor.


What is the area, in square feet, of the closet floor?
A. 19
B. 24
C. 36
D. 42
00. Marianna is trying to compute $1 \frac{3}{4} \div \frac{7}{8}$.

Which statement shows the correct value and justification?
A. 2 because $2 \times \frac{7}{8}=1 \frac{3}{4}$
B. 2 because $2 \times \frac{8}{7}=1 \frac{3}{4}$
C. $\frac{1}{2}$ because $\frac{1}{2} \times \frac{7}{8}=1 \frac{3}{4}$
D. $\frac{1}{2}$ because $\frac{1}{2} \times \frac{8}{7}=1 \frac{4}{3}$

TN175527_1
00. Raven plays on a basketball team. She earns 1 point for each free throw basket she makes.

Which equation represents the relationship between the number of free throw baskets Raven makes, $b$, and the number of points she earns, $p$ ?
A. $p=b$
B. $b=\frac{1}{p}$
C. $p=1+b$
D. $b=1+p$

TN191936_3
00. Which expression shows "subtract five from the quotient of 15 and a number"?
A. $5-\frac{15}{n}$
B. $5-15 n$
C. $\frac{15}{n}-5$
D. $15 n-5$

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