

Tennessee Comprehensive Assessment Program

TCAP

Math Grade 7 Item Release



*Standards implemented from 2023-24 Tennessee Academic Standards for Math

00. Which statements are true?

Select the **two** correct answers.

- A.** The sum of -8 and $\frac{16}{2}$ is equal to 0.
- B.** The sum of $-\frac{15}{3}$ and 5 is greater than 0.
- C.** The sum of 1.5 and $-\frac{3}{2}$ is equal to 0.
- D.** The sum of 9, -8 , and 1 is equal to 0.
- E.** The sum of -4 , 6, and -2 is less than 0.

00. What is the value of $\left(-7\frac{1}{3}\right)\left(-3\frac{2}{5}\right)$?

A. $-24\frac{14}{15}$

B. $-21\frac{2}{15}$

C. $21\frac{2}{15}$

D. $24\frac{14}{15}$

- 00.** Rita read that bears lose about 23% of their body weight during hibernation. A certain bear weighs w pounds before hibernation.

Which expressions can be used to find the expected weight of the bear after hibernation?

Select the **two** correct answers.

- A.** $0.23w$
- B.** $0.77w$
- C.** $w - 0.77$
- D.** $w(1 + 0.23)$
- E.** $w(1 - 0.23)$

T7M03S198_4

- 00.** Keyshawn purchased 3 paintbrushes, 1 set of paint, and 5 canvases. He spent a total of \$128.25 on these items. The price per item for each paintbrush and each set of paint can be seen in the table.

Art Supplies

Item	Price per Item
Paintbrush	\$9.50
Set of Paint	\$34.75

What is the total amount Keyshawn spent on canvases?

- A.** \$13.00
- B.** \$16.80
- C.** \$63.25
- D.** \$65.00

T7M03S593_3

- 00.** Alan is saving to buy a computer that costs \$2,106. Alan has saved 30% of the total cost.

About how much more money does Alan need in order to buy the computer?

- A.** \$200
- B.** \$600
- C.** \$1,500
- D.** \$1,800

- 00.** Levi read $4\frac{1}{2}$ books in $2\frac{1}{4}$ months over the summer. What is Levi's reading rate in books per month?
- A.** 2
- B.** $2\frac{1}{4}$
- C.** $6\frac{3}{4}$
- D.** $10\frac{1}{8}$

- 00.** A salesperson makes \$300 per week plus commission. Her commission is 10% of her sales. One week, her sales totaled \$4000. Taxes of 33% are deducted from both her weekly pay and her commission. How much money did she make that week after the commission was added and the taxes were deducted?
- A.** \$231.00
 - B.** \$288.00
 - C.** \$469.00
 - D.** \$700.00

- 00.** An architect is creating plans for a room addition for two different customers.
- For Customer A, the architect draws a rectangular room measuring 6 cm by 8 cm and uses a scale of 1 cm = 0.5 m.
 - For Customer B, the architect draws a rectangular room with the same measurements, but uses a scale of 1 cm = 0.75 m.

How much larger is the area, in square meters, of Customer B's room than Customer A's?

Enter your answer in the space provided.

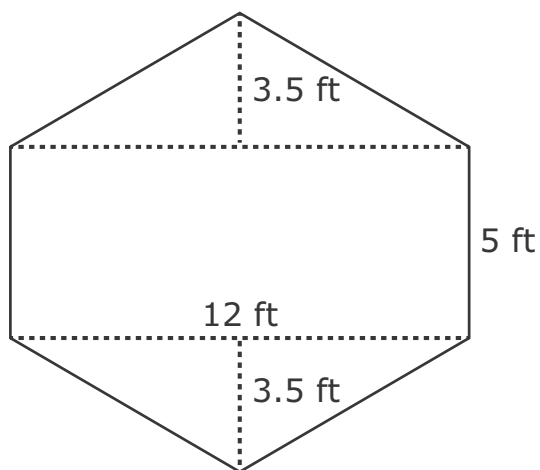
00. For which set of conditions could more than 1 unique triangle be drawn?

Select the **two** correct answers.

- A.** A triangle has angle measures of 60° , 80° , and 40° .
- B.** A right triangle has legs that are 4 cm long and 5 cm long.
- C.** An isosceles triangle has 2 sides that are 6 cm long.
- D.** An equilateral triangle has 3 sides that are 5 cm long.
- E.** A triangle has angle measures of 85° , 95° , and 10° .

TN758261_102

- 00.** Billy is painting a hexagon on a fence in his neighborhood for the homeowners' association.



What is the area, in square feet, of the hexagon to be painted?

Enter your answer in the space provided.

- 00.** A restaurant owner randomly surveyed 60 customers about which lunch they prefer. The table displays the data.

Lunch Preference

Lunch	Number of Customers
Salad	35
Sandwich	15
Other	10

The restaurant serves about 270 lunches per day.

Based on the survey results, which is the best estimate of the number of salads the restaurant should plan to serve for lunch each day?

- A.** 90
- B.** 95
- C.** 160
- D.** 190

- 00.** You are given a coin that is unfairly weighted. Flipping it 100 times, you record that it comes up heads 68 times and tails 32 times.

Considering these observations of the coin, what is the approximate probability that the coin will come up heads on the next flip?

- A.** 0
- B.** 0.5
- C.** 0.68
- D.** 1

Metadata- Math

Items

Page Number	UIN	Grade	Item Type	Key	DOK	TN Standards	Calculator
1	TN045954	7	MS	A, C	2	7.NS.A.1.a	N
2	T7M03S570	7	MC	D	2	7.NS.A.2.c	N
3	TN026999	7	MS	B, E	2	7.EE.A.2	Y
4	T7M03S198	7	MC	D	2	7.EE.B.3.a	Y
5	T7M03S593	7	MC	C	2	7.EE.B.3.b	N
6	TN0024780	7	MC	A	2	7.RP.A.1	Y
7	TN358222	7	MC	C	2	7.RP.A.3	Y
8	TN338121	7	FIB	15	3	7.G.A.1	Y
9	TN741635	7	MS	A, C	2	7.G.A.2	Y
10	TN758261	7	FIB	102	2	7.G.B.5	Y
11	T7M03S128	7	MC	C	2	7.SP.A.2	Y
12	TN067721	7	MC	C	2	7.SP.C.6.a	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; FIB = Fill-in-the-blank
Key	Correct answer.
DOK	Depth of Knowledge (cognitive complexity) is measured on a three-point scale. 1 = Recall or simple reproduction of information; 2 = Skills and concepts: comprehension and processing of text; 3 = Strategic thinking, prediction, elaboration.
TN Standards	Primary educational standard assessed.
Calculator	Y for items that permit calculator use.

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