

Tennessee Comprehensive Assessment Program

TCAP

Math Grade 7 Item Release



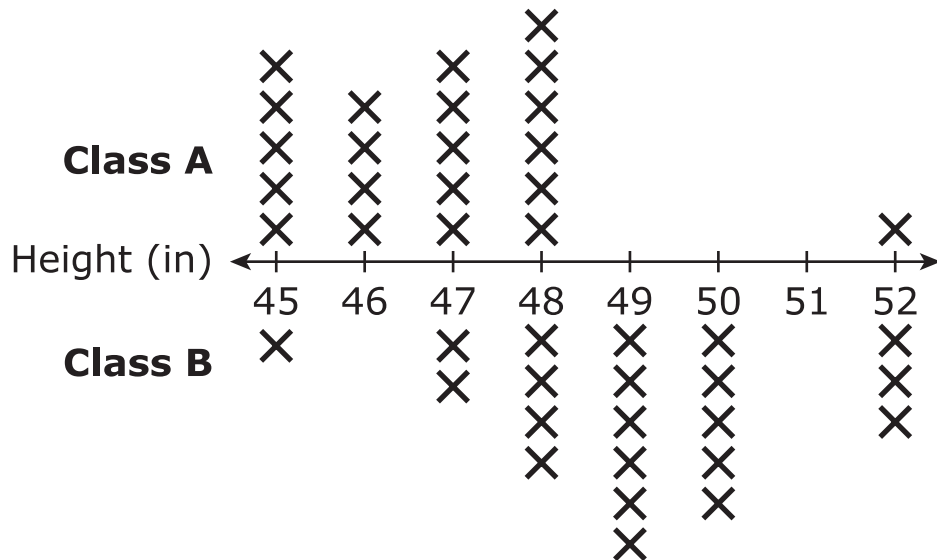
- 00.** Felicia is buying a kayak that costs k dollars. The kayak is on sale for 33% off.

Which expression could be used to determine the sale price of the kayak?

- A.** $0.33k$
- B.** $0.67k$
- C.** $k + 0.33k$
- D.** $k - 0.67k$

- 00.** Ted makes \$12 an hour delivering pizzas. If he gets a 5% raise, how much will he make delivering pizzas for 4 hours?
- A.** \$48.50
 - B.** \$50.40
 - C.** \$52.20
 - D.** \$52.80

- 00.** The heights in inches of students in two classes are shown below in a double line plot.



What can you conclude from the data?

- A.** Students in Class B are generally taller than those in Class A.
- B.** Students in Class A are generally taller than those in Class B.
- C.** The median of Class A is 48 inches.
- D.** The median for Class B is 47 inches.

00. Evaluate: $6(-\frac{2}{3}) - 1.5 + (\frac{1}{2})$

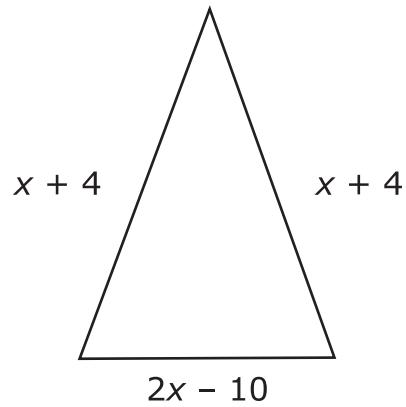
A. -6

B. -5

C. 5

D. 6

- 00.** The side lengths of a triangle are shown.



Which expressions represent the perimeter of the triangle? Select **all** that apply.

- A.** $2x - 2$
- B.** $2x - 10$
- C.** $4x - 2$
- D.** $2(x + 4 + 2x - 10)$
- E.** $2(x + 4) + 2x - 10$

- 00.** Jordan is making a scale model of the Hanging Gardens of Babylon, one of the seven wonders of the ancient world. The actual gardens were said to be 24.4 meters tall. Jordan uses a scale of $1 \text{ cm} = 0.5 \text{ m}$.

To the nearest tenth of a centimeter, what should be the height of Jordan's model?

- A.** 12.2 cm
- B.** 24.4 cm
- C.** 48.8 cm
- D.** 122.0 cm

00. If $x = 6$, which inequality is true?

A. $-4 - 2x > 9$

B. $-3 - 6x < -38$

C. $8 - 5x > 20$

D. $1 - x < -5$

00. What is this number written as a decimal?

$$5\frac{4}{5}$$

- A.** 5.8
- B.** 5.58
- C.** 5.45
- D.** 5.4

00. A scuba diver takes photographs of fish swimming below the surface of the water.

- The diver descends from the surface at a rate of 3 feet every 2.5 seconds.
- The diver takes 35 seconds to reach the depth where the fish are located.

How many feet below the surface of the water are the fish located?

- A.** 105 feet
- B.** 42 feet
- C.** 29 feet
- D.** 17 feet

- 00.** Ellen has three packages of markers. Exactly 10 of the markers in each package are yellow markers.

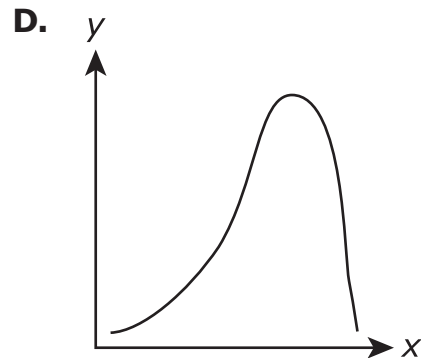
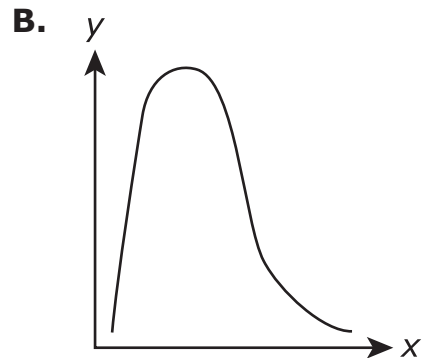
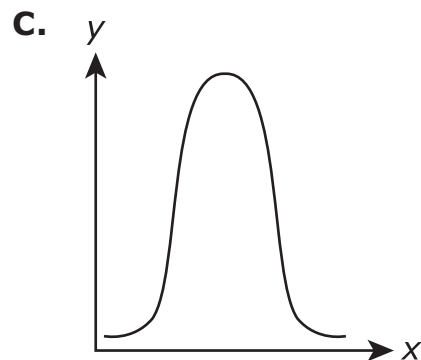
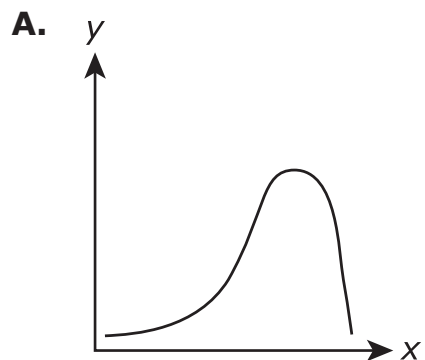
- Package *T* contains 10 markers.
- Package *V* contains 40 markers.
- Package *W* contains 40 markers.

Ellen will randomly select one marker from each package. Which statements are true?

Select the **three** that apply.

- A.** The probability of selecting a yellow marker from Package *T* is 1.
- B.** The probability of selecting a yellow marker is equal for packages *V* and *W*.
- C.** The probability of randomly selecting a yellow marker from Package *V* is $\frac{1}{3}$.
- D.** The probability of selecting a yellow marker is less for Package *W* than it is for Package *T*.
- E.** The probability of selecting a yellow marker from Package *V* is four times the probability of selecting a yellow marker from Package *T*.

- 00.** Manny collected data about the number of points a football team scored last season. He determined that the median number of points scored was equal to the mean number of points scored. Which graph best models this situation?



- 00.** A turtle walks $\frac{3}{2}$ miles in $\frac{1}{2}$ hour.

What is the turtle's unit rate in miles per hour?

A. $\frac{3}{4}$

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

C. 2

D. 3

TN175866_3

- 00.** A rectangular prism has a base that is 6 centimeters by 11 centimeters, and has a height of 5.5 centimeters.

What is the surface area, in square centimeters, of the prism?

- A.** 253
- B.** 286
- C.** 319
- D.** 363

- 00.** A cook at a restaurant is calculating the amounts of ingredients needed to make soup for the next 5 days. For each of these days, she will use $2\frac{1}{8}$ pounds of carrots and y pounds of celery. She will use a total of $19\frac{3}{8}$ pounds of carrots and celery to make all the soup.

Which equation shows how to find the number of pounds of celery, y , she will use to make soup each day?

- A.** $y = 19\frac{3}{8} - 2\frac{1}{8}$
- B.** $y = 19\frac{3}{8} \div 5$
- C.** $y = (19\frac{3}{8} - 2\frac{1}{8}) \div 5$
- D.** $y = (19\frac{3}{8} \div 5) - 2\frac{1}{8}$

- 00.** Amelia divided these mixed numbers.

$$12\frac{1}{18} \div 3\frac{11}{12}$$

Which would provide the closest estimate for the quotient and **best** describes the answer?

- A.** Round the numbers to divide 12 by 3, so the answer should be a little more than 4.
- B.** Round the numbers to divide 12 by 3, so the answer should be a little less than 4.
- C.** Round the numbers to divide 12 by 4, so the answer should be a little more than 3.
- D.** Round the numbers to divide 12 by 4, so the answer should be a little less than 3.

Metadata- Math

Items

Page Number	UIN	Grade	Item Type	Key	DOK	TN Standards	Calculator
4	TN0013228	07	MC	B	2	7.EE.A.2	N
5	TN0025867	07	MC	B	2	7.RP.A.3	Y
6	TN0028479	07	MC	A	2	7.SP.B.3	N
7	TN0032026	07	MC	B	2	7.NS.A.1d	Y
8	TN0032034	07	MS	C,E	2	7.EE.A.1	Y
9	TN0032047	07	MC	C	2	7.G.A.1	Y
10	TN0069256	07	MC	B	1	7.EE.B.4b	Y
11	TN0069342	07	MC	A	1	7.NS.A.2d	N
12	TN0069349	07	MC	B	2	7.NS.A.3	Y
13	TN0069391	07	MS	A,B,D	2	7.SP.C.5	Y
14	TN0069403	07	MC	C	1	7.SP.D.8b	Y
15	TN175742	07	MC	D	2	7.RP.A.1	N
16	TN175866	07	MC	C	2	7.G.B.5	Y
17	TN375564	07	MC	D	2	7.EE.B.4	Y
18	TN777076	07	MC	C	2	7.EE.B.3	N

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 write or type their responses.
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.