Tennessee Comprehensive Assessment Program

TCAP

Math
Grade 6 Item Release

Spring 2023

TN Department of **Education**

00. A rectangle has a length of $\frac{4}{5}$ foot and an area of $\frac{8}{15}$ square foot.

What is the width, in feet, of the rectangle?

A. $\frac{4}{15}$

B. $\frac{32}{75}$

C. $\frac{2}{3}$

D. $\frac{3}{2}$

00. Which values represent temperatures above 0° F?
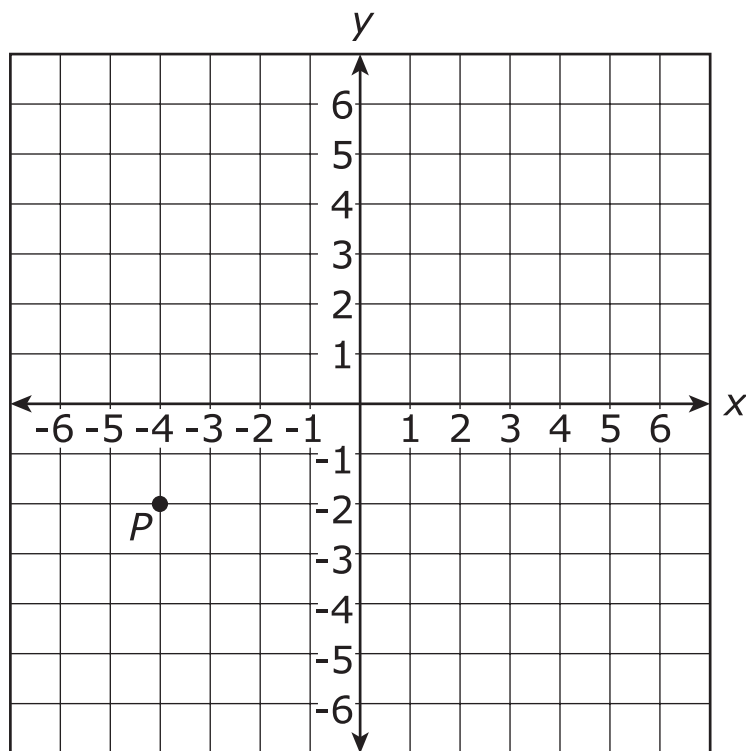
Select the **two** correct answers.

A. −28° F

B. 28° F

C. 0° F

D. −17° F

E. 17° F

00. Point *P* will be reflected across the *x*-axis and then the *y*-axis.

What ordered pair represents the final location of the point?

A. (2, 4)

B. (4, 2)

C. (4, −2)

D. (−2, −4)

00. A freezer manufacturer requires all freezers to keep their contents at or below 2 degrees below zero Celsius.

Freezer Temperatures

Freezer	A	B	C	D	E
Temperature	−3°C	−1.9°C	−4.2°C	1°C	0.2°C

Which freezers meet the manufacturer's requirement?

Select the **two** correct answers.

A. Freezer A

B. Freezer B

C. Freezer C

D. Freezer D

E. Freezer E

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00. A fish was recorded swimming 12 miles per hour.

Which expression represents the distance the fish swims in x hours?

A. $x + 12$

B. $x - 12$

C. $12x$

D. $\dfrac{x}{12}$

00. Rodney wants to save money to buy basketball shoes. The shoes he wants to buy cost $72.99.
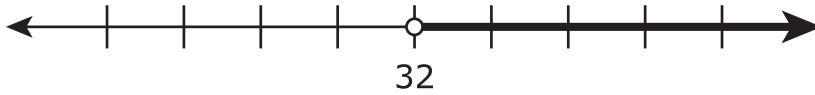
If Rodney already has $32.46, which equation can he use to find out how much more money, x, he needs to save?

A. $32.46x = 72.99$

B. $x + 32.46 = 72.99$

C. $72.99 \div x = 32.46$

D. $32.46 - x = 72.99$

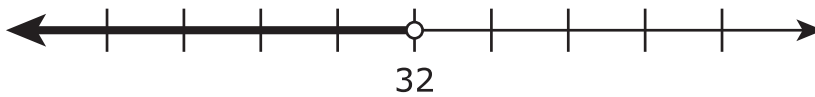*Standards implemented from 2023-24 Tennessee Academic Standards for Math

00. A student read more than 32 pages of a book.

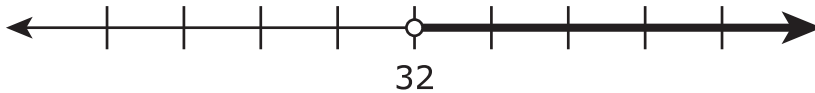Which inequality and graph **best** represent p, the number of pages read by the student?
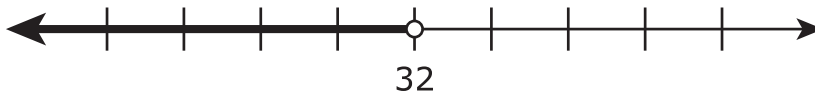
A. $p < 32$

32

B. $p < 32$

32

C. $p > 32$

32

D. $p > 32$

32

00. Which equation represents the length of the side of a square, *s*, given the perimeter, *p*?

A. $s = 4p$

B. $s = \frac{1}{4}p$

C. $s = 2p$

D. $s = \frac{1}{2}p$

00. When making a cookie recipe, a baker combines 1 cup of sugar with 3 cups of flour.

Which statements represent the ratio of flour to sugar in the cookie recipe?

Select the **two** correct answers.

A. The ratio of flour to sugar is 3**:**1.

B. The ratio of flour to sugar is 1**:**3.

C. There are 3 cups of sugar per cup of flour.

D. The baker uses twice as many cups of flour as sugar.

E. For every 3 cups of flour, the baker uses 1 cup of sugar.

00. Karen is thinking about starting a honeybee farm in her back yard. She gathers the following information about honeybees.

The ratio of beehives to pounds of honey produced is approximately 2:60. The table shows the ratio of beehives to pounds of honey produced for multiple honeybee farms.

Beehives	2	4	x	20
Pounds of Honey	60	120	240	y

What is the value of y in the table?
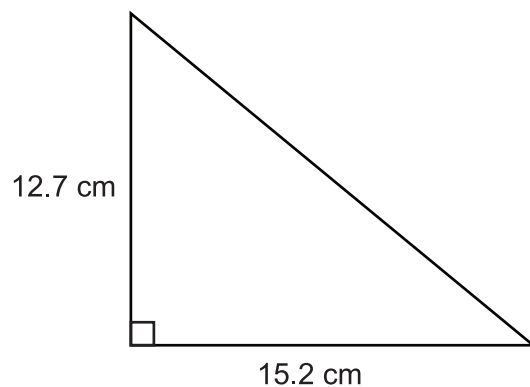
Enter your answer in the space provided.

00. Pat paid $1.20 for 3 pounds of bananas.

Which rates are equivalent to the unit rate of Pat's purchase?
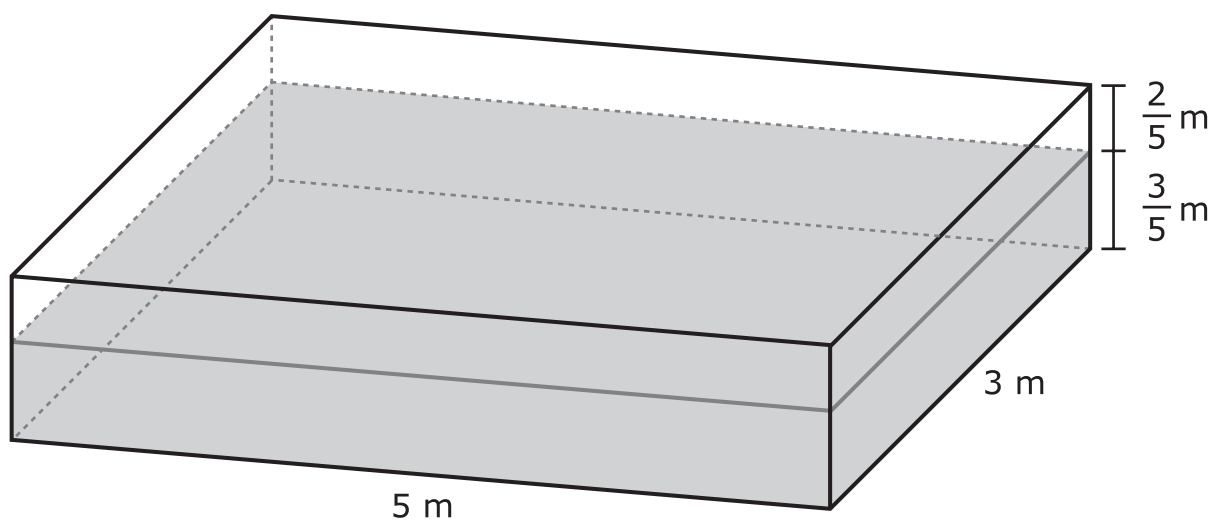
Select the **two** correct answers.

A. $0.35 for 1 pound

B. $0.70 for 2 pounds

C. $1.60 for 4 pounds

D. $2.00 for 5 pounds

E. $2.50 for 6 pounds

00. What is the area, in square centimeters, of the triangle shown?

- **A.** 13.95 cm^2
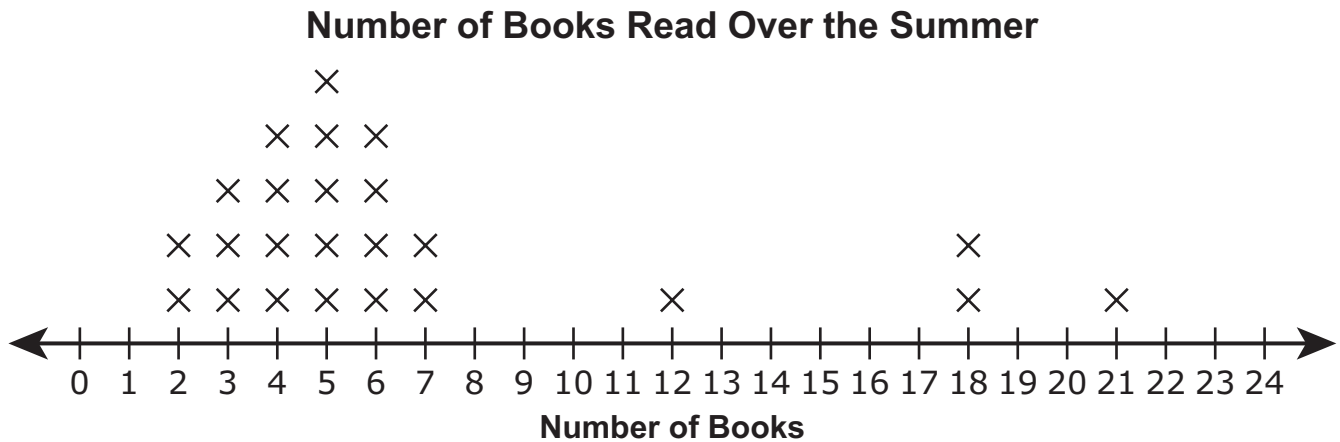- **B.** 96.52 cm^2
- **C.** 193.04 cm^2
- **D.** 386.08 cm^2

00. A water tank is in the shape of a rectangular prism with dimensions in meters. Water has been added to the tank to a height of $\frac{3}{5}$ meter as shown.

What is the volume, in cubic meters, of water needed to fill the rest of the tank?

A. 6

B. $15\frac{2}{5}$

C. $15\frac{3}{5}$

D. 9

00. Ms. Clements asked her sixth-grade students how many books from the Summer Reading List they had read over the summer. The results are displayed in the dot plot.

Number of Books Read Over the Summer

Which phrase **best** describes the shape of this graph?

A. contains no gaps

B. is clustered left

C. is clustered right

D. is symmetrical

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Metadata- Math

Items

Page Number	UIN	Grade	Item Type	Key	DOK	TN Standards	Calculator
1	TN0018385	6	MC	C	2	6.NS.A.1	N
2	TN0018672	6	MS	B, E	1	6.NS.C.5	Y
3	TN175456	6	MC	B	2	6.NS.C.6b	Y
4	TN186219	6	MS	A, C	2	6.NS.C.7b	Y
5	TN0004466	6	MC	C	2	6.EE.B.6	Y
6	TN186642	6	MC	B	2	6.EE.B.7	N
7	T6M03S536	6	MC	C	2	6.EE.B.8	N
8	TN0025847	6	MC	B	2	6.EE.C.9a	N
9	TN472645	6	MS	A, E	1	6.RP.A.1	Y
10	TN0046047	6	FIB	600	2	6.RP.A.3a	Y
11	TN175384	6	MS	C, D	2	6.RP.A.3b	Y
12	TN0032002	6	MC	B	1	6.G.A.1	Y
13	T6M03S195	6	MC	A	2	6.G.A.2	Y
14	TN0057657	6	MC	B	1	6.SP.A.2	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; 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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