

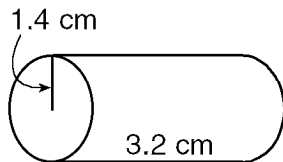
# STAAR 8th Grade Math Sample Exam

Name: \_\_\_\_\_

- 1) A field goal kicker has a 65% success rate for kicks less than 35 yards in length. During the season, this kicker is expected to have 40 attempts from this distance. How many of these attempts are expected to be successful?

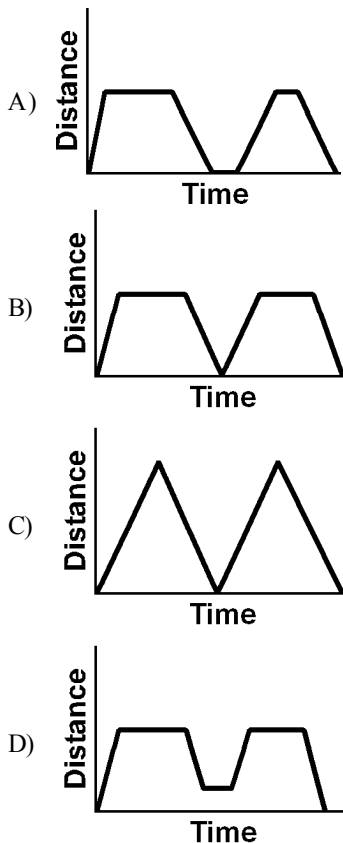
A) 14                      B) 26                      C) 22                      D) 35

- 2) What is the total surface area of the solid below to the nearest hundredth?

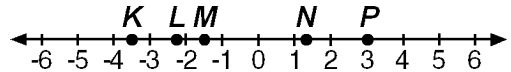


A) 28.13 cm<sup>2</sup>                      C) 40.44 cm<sup>2</sup>  
 B) 92.44 cm<sup>2</sup>                      D) 19.69 cm<sup>2</sup>

- 3) On Wednesday, Andrew got up late so he had to run to get to school on time. After school, he walked home and stayed there several hours until he returned to school for a band concert. After the concert, he walked straight home. Which graph below correctly depicts this situation?



- 4) Use the number line below to answer the given question.



Which of the letters shown represents  $-\sqrt{5}$  on the number line?

A) *N*                      B) *M*                      C) *L*                      D) *P*

- 5) A buyer for a men's clothing store can buy 40 sports jackets for \$1,040 and a single suit for \$45. If the buyer orders 40 sports jackets and 30 suits, what is the total cost of the order?

A) \$2,480                      C) \$2,490  
 B) \$1,350                      D) \$2,390

- 6) In a survey of 2,175 students, 8% said that Texas should have school year round but also have shorter days. Is 17,174, or 1,740 a reasonable estimate for the number of students wanting year-round school?

- 7) The table below shows the cost of items needed to play soccer. Susan concludes that the average cost of soccer supplies are \$7.89.

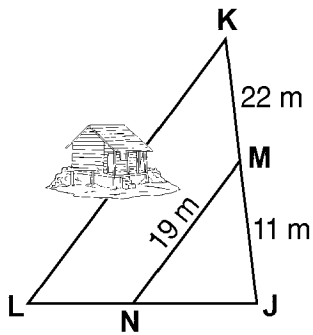
**Costs of Soccer Supplies**

Supplies	Price
Soccer balls	\$1.99 each
Cleats	\$15.00 pair
Practice cones	\$0.99 each
Shin guards	\$2.45 pair
Uniforms	\$5.99 each
Goals	\$20.89 each

Why is Susan making an incorrect conclusion?

- A) Susan thinks that a soccer team needs the same number of each item.  
 B) Susan assumes that the price of the items sold in pairs should be doubled since there are two items.  
 C) Susan believes that the cost of items sold as pairs should be halved.  
 D) Susan wants to buy new uniforms only.

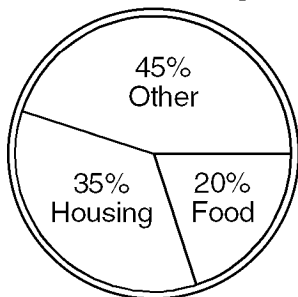
- 8) A surveyor needs to find the length of  $\overline{KL}$ , but a mountain cabin blocks his direct line of sight through his scope.



If  $\triangle JKL$  and  $\triangle JMN$  are similar triangles, what is the length of  $\overline{KL}$ ?

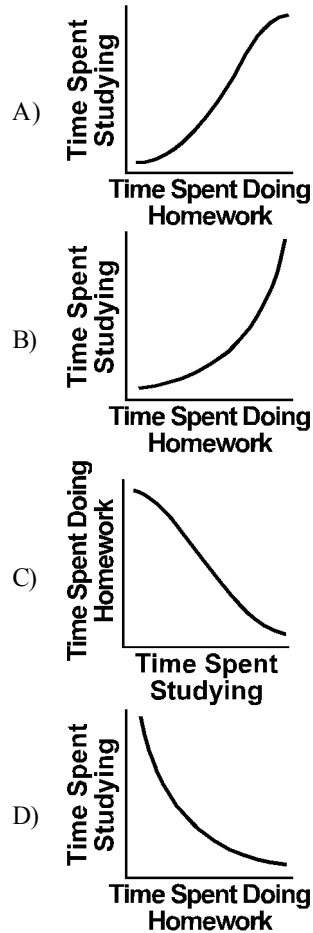
- A) 30 m                                      C) 52 m  
 B) 57 m                                      D) 38 m
- 9) Express in simplest form:  $\frac{(2 \times 10^2)(7 \times 10^3)}{(4 \times 10^6)(5 \times 10^{-2})}$
- 10) Andy stuffed 257 envelopes one day and 308 the next day. How many envelopes did Andy stuff in those two days?  
 A) 675                                      C) 576  
 B) 566                                      D) 565
- 11) What is "210 heartbeats in 3 minutes" written as a unit rate?  
 A) 210 heartbeats/minute  
 B) 70 heartbeats/minute  
 C) 70 heartbeats  
 D) 105 heartbeats/minute
- 12) The circle graph below represents the Mansi family's monthly budget.

**Mansi Family Budget**



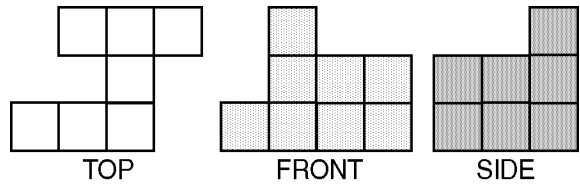
If their total monthly income is \$2,400, how much is spent on housing?

- 13) Mark did a survey in his science class and found that in general, the more time a student spent doing their homework each night, the less time they had to study before a test. Which of the following graphs best represents the results of Mark's survey?

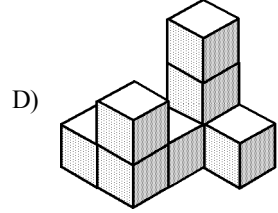
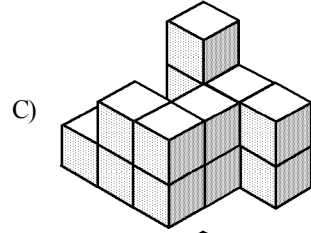
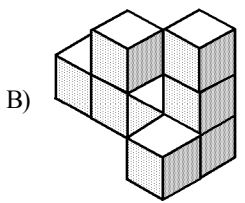
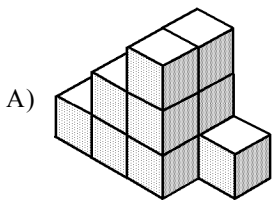


- 14) Recently, 124 adults and 67 children attended a community theater production. Tickets for children cost \$4.25 each and the ticket sales totaled \$1,090.75. What is an equation that can be used to find the cost,  $c$ , of an adult ticket?  
 A)  $124c + 67 = \$1,090.75$   
 B)  $124c + \$4.25 = \$1,090.75$   
 C)  $124c - \$4.25(67) = \$1,090.75$   
 D)  $124c + \$4.25(67) = \$1,090.75$

- 15) The diagram below indicates 3 different views of a three-dimensional figure constructed from cubes.



Which of the following images can possibly be this figure?



- 16) Choose the symbol (<, >, or =) that when placed in the box will make the statement true.

$-1 \square 42$

- A)  $-1 > 42$       B)  $-1 < 42$       C)  $-1 = 42$

- 17) Create a stem-and-leaf plot for the following numbers:

6, 17, 5, 4, 14, 14

- 18) The Ridgewood Parks Department wants to dig a cylindrical tunnel to supply water for a flamingo pond. The tunnel will be 80 feet long with a diameter of 3 feet. To the nearest cubic foot, how much soil needs to be removed to build the tunnel?

- A)  $754 \text{ ft}^3$       C)  $2,262 \text{ ft}^3$   
 B)  $566 \text{ ft}^3$       D)  $565 \text{ ft}^3$

STAAR 8TH GRADE MATH, Ch 5 #77 Stds: (TEKS) (8.11)(B)S

1) B

STAAR 8TH GRADE MATH, Ch 4 #96 Stds: (TEKS) (8.8)(A)S

2) C

STAAR 8TH GRADE MATH, Ch 2 #208 Stds: (TEKS) (8.4)(A)R

3) A

STAAR 8TH GRADE MATH, Ch 1 #218 Stds: (TEKS) (8.1)(C)S

4) C

STAAR 8TH GRADE MATH, Ch 1 #764 Stds: (TEKS) (8.2)(B)R

5) D

STAAR 8TH GRADE MATH, Ch 6 #65 Stds: (TEKS) (8.14)(B)PS

6) 174

(Answers may vary based on estimation methods.)

STAAR 8TH GRADE MATH, Ch 5 #478 Stds: (TEKS) (8.13)(B)R

7) A

STAAR 8TH GRADE MATH, Ch 4 #309 Stds: (TEKS) (8.9)(B)R

8) B

STAAR 8TH GRADE MATH, Ch 1 #370 Stds: (TEKS) (8.1)(D)S

9) 7

STAAR 8TH GRADE MATH, Ch 1 #678 Stds: (TEKS) (8.2)(B)R

10) D

STAAR 8TH GRADE MATH, Ch 1 #856 Stds: (TEKS) (8.2)(D)S

11) B

STAAR 8TH GRADE MATH, Ch 2 #355 Stds: (TEKS) (8.5)(A)R

12) \$840

STAAR 8TH GRADE MATH, Ch 6 #189 Stds: (TEKS) (8.16)(A)PS

13) D

STAAR 8TH GRADE MATH, Ch 2 #311 Stds: (TEKS) (8.5)(A)R

14) D

STAAR 8TH GRADE MATH, Ch 3 #166 Stds: (TEKS) (8.7)(A)S

15) C

STAAR 8TH GRADE MATH, Ch 1 #34 Stds: (TEKS) (8.1)(A)R

16) B

STAAR 8TH GRADE MATH, Ch 5 #326 Stds: (TEKS) (8.12)(C)S

17)

Stem	Leaf
0	4 5 6
1	4 4 7

STAAR 8TH GRADE MATH, Ch 4 #246 Stds: (TEKS) (8.8)(C)R

18) D