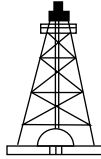


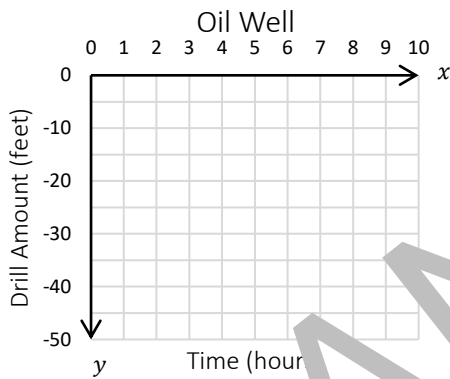
1. The drill on an oil derrick went  $-30$  feet in 6 hours. Based on this information, complete the table and graph the relationship.

Oil Well

Time (hours), $x$	Drill Amount (feet), $y$
0	
1	
6	$-30$
9	



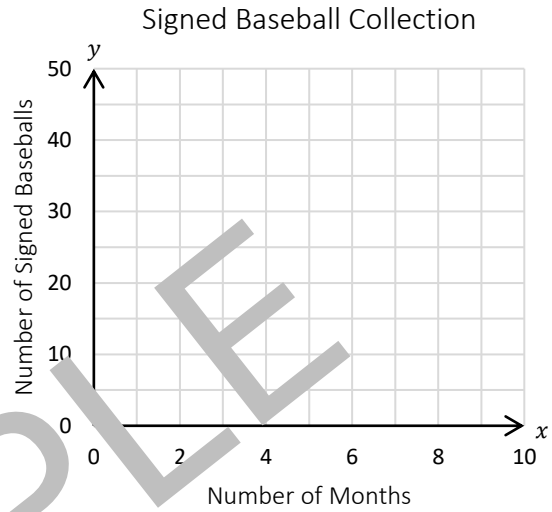
What is the unit rate, or feet drilled in a single hour? \_\_\_\_\_



If the points are connected, what is the slope of the line? \_\_\_\_\_

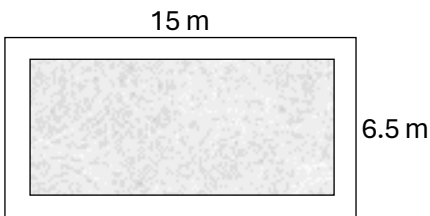
TEKS 8.4B

2. Warren had a collection of 40 signed baseballs. He gave away 5 of these baseballs per month until all his signed baseballs were gone. Create a graph to represent this situation.



TEKS 7.7A

3. Architect Garza designed a pool for the Kim family. If he must convert the measurements to customary units to purchase building materials for the pool, what will be the measurements of the pool? (1 meter  $\approx$  1.093 yards)



Length: \_\_\_\_\_

Width: \_\_\_\_\_

TEKS 7.4E

4. Chef Leondrae makes and sells bags of candy. To produce a bag of candy, it costs Leondrae \$0.04 for each piece of candy in the bag, and \$0.36 for the bag itself. Write an equation to show the relationship between the total cost of production,  $p$ , and the number of candy pieces in a bag,  $c$ . The equation should be written in slope-intercept form.

Equation: \_\_\_\_\_

TEKS 8.5I

1. Mia sells flowers in her shop. Each flower sells for \$1.50, and Mia charges \$5 for the glass vase to hold each arrangement. Julio paid \$41 for a floral arrangement. Using the equation  $1.5f + 5 = 41$ , which arrangement shows the number of flowers,  $f$ , in Julio's arrangement?

Arrangement A	1 dozen
Arrangement B	1 ½ dozen
Arrangement C	2 dozen
Arrangement D	2 ½ dozen
Arrangement E	3 dozen



Solution: \_\_\_\_\_

TEKS 7.11

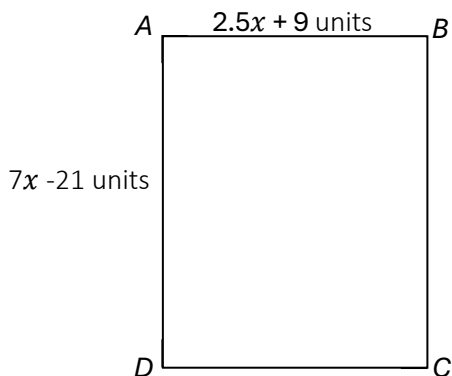
3. Two families went to a water park last Saturday.

- The Garcia family bought 8 tickets and received a \$100 discount.
- The Lopez family bought 5 tickets and received a \$55 discount.
- Both families spent the same total amount of money on tickets.
- The price of each ticket was the same.

What was the cost of each ticket? \_\_\_\_\_

TEKS 8.8C

2. Rectangle  $ABCD$  is shown with the dimensions given in units.



The length of  $\overline{AB}$  is less than the length of  $\overline{AD}$ . Write an inequality to represent this situation.

Inequality: \_\_\_\_\_

TEKS 8.8A

4. Two-thirds of the seventh-grade students had their picture taken for the school yearbook. If 124 students had their pictures taken, how many students,  $s$ , are in the seventh grade? Write an equation, and then solve for the number of students in 7<sup>th</sup> grade.

124
-----

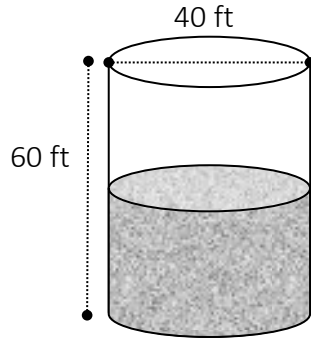
$s$
-----

Equation: \_\_\_\_\_

Solution: \_\_\_\_\_

TEKS 7.11A

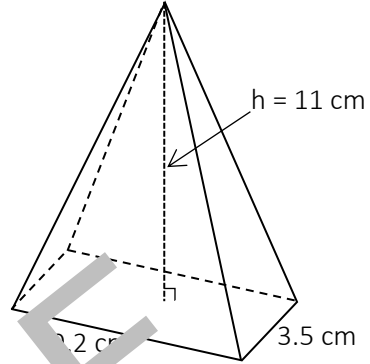
1. A grain silo, in the shape of a cylinder, stands 60 feet tall and has a diameter of 40 feet. If the silo is one-half full, what is the volume of grain in the silo to the nearest tenth of a cubic foot?



Volume of Grain in Silo: \_\_\_\_\_

TEKS 8.4A

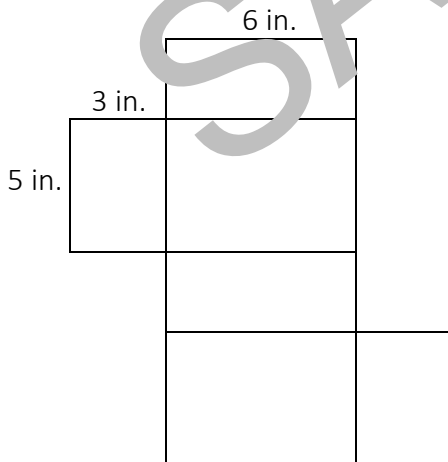
2. Determine the volume of the pyramid. Round the answer to the nearest tenth of a cubic centimeter.



Volume: \_\_\_\_\_

TEKS 7.9A

3. The dimensions of a rectangular prism are given in the net shown. What is the total surface area of the rectangular prism in square inches?



Total Surface Area: \_\_\_\_\_

TEKS 7.9D

4. The table shows the dimensions of three cylinders.

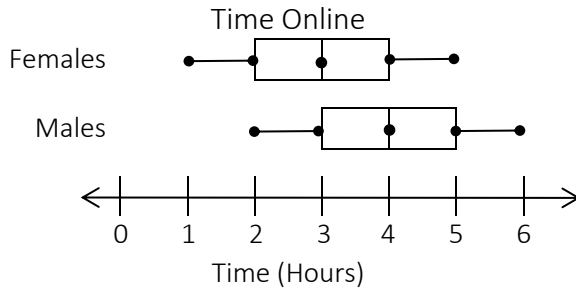
Cylinders		
Cylinder	Radius (in.)	Height (in.)
<i>L</i>	8	4
<i>M</i>	9	12
<i>N</i>	6	18

Which two cylinders have the same lateral surface area in square inches?

Solution: \_\_\_\_\_

TEKS 8.7B

1. The double box plot summarizes the results of a random survey of 20 females and 20 males. Each person stated the number of hours spent online last Saturday.



Based on the box plot, mark each statement as true or false.

	True	False
Overall, females were online for more hours than males.		
Both box plots show symmetrical data.		
The interquartile range for males and females is 6 hours.		

TEKS 7.12A

2. The list shows the weight in pounds of 6 newborn babies.

9, 4.8, 8.4, 7.5, 6.8, 8.4

What is the mean absolute deviation of these numbers?

Mean Absolute Deviation: \_\_\_\_\_

TEKS 8.11B

3. The game warden counted the number of deer in random plots or sections of a local ranch.

6	4	2	7
	1		4 5
9	1	4	5 2
	2	3	2
7		8	5
	5	1	4 1

Based on the game warden's count, what is the average number of deer that the rancher can expect to find in any one section of his ranch?

Number of deer per plot: \_\_\_\_\_

TEKS 8.11C

4. A pollster conducted a random survey of 100 voters regarding their choice of governor. The table shows the results of the survey.

Election Poll


Candidate	Number of Votes
A	35
B	50
C	15

Based on the poll, which inference is valid?

	Yes	No
More than 50% of those polled chose Candidate B.		
Less than 20% of those polled chose Candidate C.		

TEKS 7.12B

1. The table shows Nathan’s net worth statement.

Net Worth Statement 


Item	Value
Bank accounts	\$23,570
Motorcycle (current value)	?
Student Loans	-1,200
Credit Card Debt	-\$590
Investments	\$2,500

Nathan’s net worth is currently \$35,780. Based on the information in the table, what is the current value of Nathan’s motorcycle?

Value of Motorcycle: \_\_\_\_\_

TEKS 7.13C

2. A monthly budget for the Smith family is shown.

Smith Family Budget 

Item	Amount
Apartment Rent	\$1,100
Food	\$450
Fuel	\$150
Daycare	\$300
Insurance	\$800
Other	\$150

Write an equation that can be used to find  $b$ , the minimum amount of money the family must earn annually to meet this budget.

Equation: \_\_\_\_\_

TEKS 7.13D

3. Cisco wants to open a savings account with a deposit of \$3,000. Cisco will not make any additional deposits or withdrawals after he opens the account. His bank offers two different savings accounts.

- Account X pays 3.5% simple annual interest.
- Account Y pays 3.6% interest compounded annually.

Which account will result in Cisco earning more interest money? \_\_\_\_\_

How much more interest money will Cisco earn? \_\_\_\_\_

TEKS 8.12D

4. Farik opened an investment account. At the end of each year, the bank paid 5.5% annual simple interest on the money in Farik’s account. The table shows the activity over three years.

Farik’s Investment Account Activity

Year	Beginning Balance for Year	January 1 <sup>st</sup> Deposit	New Balance	Interest Rate	Interest Earned	Ending Balance for Year
1	\$0.00	\$1,000.00	\$1,000.00	5.5%	\$55.00	\$1,055.00
2	\$1,055.00	\$1,000.00	\$2,055.00	5.5%	\$113.03	\$2,168.03
3	\$2,168.03	\$1,000.00	\$3,168.03	5.5%	\$174.24	\$3,342.27

List two reasons the balance in this account has grown.

- \_\_\_\_\_
- \_\_\_\_\_

TEKS 8.12C