Name: $\qquad$

## Unit 1 Review

1) What is $\frac{4}{7} \cdot \frac{10}{21}$ ?
A) $\frac{40}{147}$
B) $\frac{3}{5}$
C) $\frac{5}{6}$
D) $\frac{6}{5}$
2) What is $2 \frac{2}{3}+\frac{2}{3}$ ?
A) $\frac{1}{4}$
B) $1 \frac{7}{9}$

2. Amy is making a puppet that requires equal pieces of string to make it dance. Amy has 33 inches of string. How many $5 \frac{1}{2}$ inch pieces can she cut from the string?
A) 4
B) 6
C) 7
D) 8

Eric bought 300 t-shirts, which were sold in packs of 12 . How many packs did Eric buy?
A) 20
B) 25
C) 28
D) 30
5. Katrina is 69.75 inches talL. Her best friend, Allison, is 64.85 inches in height.

How many inches taller is Katrina than Allison?
A) 4.10
B) 4.90
C) 5.10
D) 5.90

Cara has 42.5 pounds of coffee. If she splits the coffee into 2.5 pound bags, how many bags will she need?
A) 17
B) 19
C) 21
D) 23
F. Helping Hearts is making care packages. 36 bars of soap and 27 tubes of toothpaste are available. Each package will contain an equal number of each item. What is the greatest number of care packages that Helping Hands can make?

$$
\text { A) } 3 \text { packages }
$$

C) 9 packages
B) 6 packages
D) 12 packages
8. A store has two brands of pencils on sate for the day. Brand A comes in packs of 4, and Brand $B$ comes in packs of 10 . If an equal number of each brand sold, what is the minimum number of each sold?
A) 14
B) 20
C) 28
D) 36

1) Kelly has 15 blue bracelets and 12 green bracelets. What is the ratio of Kellys blue bracelets to green bracelets?
A) $3: 4$
C) $4: 3$
D) $5: 4$
E) $4: 5$
2) If a car travels 640 miles in 11 hours, what is the average rate (speed) of the car?
A) 0.017 mph
B) 17.12 mph
C) 5818 mph
D) 62.9 mph
3) Select the best deal for tutoring help for your Algebra I class.
A) 545 for 1 hour
C) $\$ 30$ for 50 minutes
B) all the same rate
D) 520 for 30 minutes
4) A computer programmer worked 12 hours and earned $\$ 510$. What is the hourly rate?
A) $\frac{542.50}{1 \text { hour }}$
B) $\frac{\$ 47.25}{1 \text { hour }}$
C) $\frac{550,00}{1 \text { hour }}$
D) $\frac{541.25}{1 \text { hour }}$
5. How many people can be served from one cup of oatmeal? How many cups will it take to serve 27 people?
A) 2 people; 14 cups
B) 3 people; 9 cups
C) 3 peoplen 6 cups
D) 9 people, 3 cups

Q. If you can read 40 pages in 2 hours, how mamy pages can you read in 5 hours?
A) 20
B) 80

6. If 12 cows produce 70 gallons of milk, how many gallons of milk would 42 cows produce?
A) 245 gallons
B) 315 gallons
C) 512 gallons
D) 840 gallons
7. $30 \%$ of the employees at a company picnic ate a hot dog for lunch. If 18 employees ate a hotdog, how many people were at the picnic?
A) 20

| C) 60 |
| :---: |
| D) 90 |

9. Change 5000 meters to kilometers.
A) 0.5 km
B) 5 km
C) 50 km
D) 500 km

10 To the nearest hundredth, how many cm are in 36 in ? ( $1 \mathrm{in}=2.54 \mathrm{~cm}$ )
A) 81.44 cm
B) 88.20 cm
C) 91.44 cm

1) Evaluate.
A) 21
B) 49
C) 81
D) 343
2. Translate the phrase to an algebraic expression.

Eighty less than four times a number.
A) $4 x-80$
B) $4 x+80$
C) $4 x+80$
D) $80-4 x$
3. If $c=30$ and $d=8$, then $2 c+4 d=$
A) 512
B) 278
C) 136
D) 92
4. What is the value of $x^{2}+4$ for $x=5$ ?
A) 14
B) 21

| C 29 |
| :---: |
| $D) 41$ |

5. Evaluate if $x=4$.

$$
\frac{3 x+1}{4}
$$

A) 2
B) 3
C) $\frac{11}{4}$
D) $\frac{15}{4}$
6. Which expression is equivalent to $5(x+7)$ ?
A) $5 x+12$
B) $5 x+35$
C) $5 x+7$
D) $40 x$
7. Which expression is equivalent to $x+x+x+5+5$, no matter what value is substituted in for $x$ ?
A) $3 x+5$
B) $3 x+7$
C) $x+10$
D) $3 x+10$
8.
A) $x=4$

$$
3 x=15
$$

C) $x=6$
D) $x=12$
9.
A) $x=-3$
B) $x=2$

$$
x-6=3
$$

$$
\text { © } x=3
$$

D) $x=9$
A) $x=5$
B) $x=7$
C) $x=9$
D) $x=14$
11. Ginger wants to join a gym. She goes to the local gym and is told that there is a one-time fee of $\$ 100$ to join and then a monthly fee of $\$ 30$. What algebraic expression represents the total cost of joining the gym?
A) 130
B) 130 m
C) $m-30 \mathrm{~m}$
D) $30 m+100$
12.


Which inequality corresponds with the graph?
A) $x>7$
C) $x>-2$
B) $x<-2$
D) $x \geq-2$
13.


Which inequality is represented by the number line graph?
A) $x>-6$
B) $x<-6$
C) $x \geq-6$
D) $x \leq-6$
14. The time it takes a brick layer to lay bricks varies directly with the number of bricks. The brick layer's data is shown in the table. If $x=$ time, and $y=$ the number of bricks, which equation models the brick layer's direct variation?
A) $y=50 x$
B) $y=100 x$
C) $y=50+x$
D) $y=100+x$

| Time (hours) | Number of Bricks |
| :---: | :---: |
| 2 | 100 |
| 4 | 200 |
| 6 | 300 |
| 8 | 400 |

## Unit 6: Statistical Analysis Review

How many more students ate 3 pieces of pizza than ate 5 pieces of pizza?
A) 2
B) 3

(2)

What is the range? 6

What is the mode? $\qquad$ 2

How many students ate at least 4 pieces of pizza? $\qquad$ 6

Pieces of Pizza Eaten by Mr. Gatlin's Class

(5) Which question is a statistics question that anticipates variability?
A) How do I rate the taste of ice-
cream on a scale of $1=10$ ?
How does my brother rate the
6) taste of ice cream on a scale of 1. 10 ?
C) Does my father or my mother like the icecream from the grocery store better?
D) Which brand of ice cream is preferred by
the people shopping at a grocery store?

## $72,60,74,68,65,66,72,70,68,80,74$

(6) Sara's recent golf scores are shown. From the data shown what is the median of her scores?
A) 65

| C) 72 |
| :--- |
| D) 80 |

(7) Using the data above, what is the range of her scores? $\qquad$ Mode? 68, 72, 74, 80 Mean? 71.72

Consider Frank's math test scores for the semester. Find the interquartile range of the scores.
A) 2
C) 17
B) 12
D) 21


Jenny recorded the weight of 5 dogs. Each dog weighed a different amount. She recorded the results on a box plot. Which conclusion can be made about the interquartile range of Jenny's box plot?
A) All the dogs weighed 15 pounds
or less.
B) All the dogs weighed between 5 and 15 pounds.

## The middle $50 \%$ of the dogs weighed between 5 and 15 pounds.

The interquartile range was higher than it
D) should be because of the dog that weighed 20 pounds.
(10) Which measure of central tendency is MOST EASILY affected by outliers?
A) mean
C) mode
B) median
D) $I Q R$

## $23,34,27,7,30,26,28,31,34$

(11)

What number is an outlier for the given data?
A) 7
B) 23
C) 31
D) 34

1. Which figure can be made from the net below?


A triangular pyramid
B rectangular pyramid
C triangular prism
D rectangular prism
2. What solid figure will the net shown make? M6G2.d


## A a cylinder

B a square pyramid
C a triangular prism
D a right rectangular prism
3. What is the surface area of the solid figure that the net below will form?


* 120 cm

8. 124 cm

* $142 \mathrm{~cm}^{2}$
Q $142 \mathrm{~cm}^{3}$

4. Which solid figure will the net shown form when folded?


A a cylinder
B a cylindrical prism
C a rectansular nyramid
D a rectangular prism
5. What is the surface area of the solid figure that the net will form? See net above
A 120 in .
B 124 in .
in \#4
C $142 \mathrm{in}^{2}$
D $1+2 \mathrm{in}^{\prime}$
6. What is the volume of the bor shown below?


A 37.000 in'
B $37.500 \mathrm{in}^{\prime}$
C 38,000 in $^{\prime}$
D $38.500 \mathrm{in}^{\prime}$

48 square cm
(answer is not above!)

