

EOG REVIEW PACKET**I. Number Systems**

- 1) How many $\frac{1}{6}$ cup portions are in $\frac{2}{3}$ cup of juice?
- A) $\frac{1}{3}$ of a portion
B) $\frac{1}{4}$ of a portion
C) 4 of a portion
D) $\frac{5}{6}$ of a portion
- 2) Kris wants to save \$72 for his mother's gift. Her birthday is in 3 weeks and has saved \$42. How much will he need to save each week in order to buy her birthday gift?
- A) \$12
B) \$16
C) \$10
D) \$12.50
- 3) A student is growing plants for a science project. Plant 1 is 12.45 cm tall. Plant 2 is 4.5 cm is taller than Plant 1 and Plant 3 is 3.75 cm shorter than Plant 2. How tall is Plant 3?
- A) 12.25 cm
B) 13.2 cm
C) 20.7 cm
D) 25.45 cm
- 4) You are making bags of trail mix for a field trip. You have 12 ounces of peanuts and 36 ounces of cashews. You need to have the same amount of nuts in each bag. What is the greatest number of bags that you can make that will have the same number of ounces of nuts in each bag?
- A) 12 bags
B) 48 bags
C) 6 bags
D) 9 bags
- 5) To rent a bicycle at the beach there is an initial fee of \$12. For each hour the bicycle is rented, there is an additional \$5 fee. If the charge was \$27, how long was the bicycle rented?
- A) 7 hours
B) 9 hours
C) 3 hours
D) 12 hours
- 6) Sal and Jane are go to a baseball game. Popcorn bags cost \$3 each and drinks are \$4 each. Sal and Jane order 3 bags of popcorn and 4 drinks and pay with a \$50 bill. What is their change?
- A) \$30
B) \$22
C) \$15
D) \$25
- 7) Maddie cuts a 6 yard length of ribbon into $\frac{1}{3}$ yard pieces. How many cuts did she make?
- A) 17 cuts
B) 12 cuts
C) 8 cuts
D) 18 cuts

- 4) Jill needs to save at least \$45 for a ticket to the play. She already has \$26. She wrote an inequality to reflect how much more money she needs.

$$s \leq \$19$$

Which statement is true?

- A) Jill's inequality is incorrect because 19 should be added to 45.
B) Jill's inequality is incorrect because the inequality sign is incorrect.
C) Jill's inequality is correct because she used \leq to represent "at least".
D) Jill's inequality is correct because the amount she needs to save is less than \$19.

- 5) An inequality is written in the box.

$24 > 8x$

Which numbers can replace x to make the inequality true?

- A) 0, 1, 2, 3,
B) 0, 1, 2
C) any number greater than 3
D) any number less than or equal to 3
- 6) Represent the following expression algebraically:
A number, x , decreased by the sum of $2x$ and 5
- A) $(2x + 5) - x$
B) $x - (2x + 5)$
C) $x - 2x + 5$
D) $(x + 2x) - 5$

- 7) Evaluate the expression $3x + 2y$ when x is equal to 4 and y is equal to 2.4.

- A) 16.4
B) 14.4
C) 16.8
D) 4.24

- 8) It costs \$100 to rent the skating rink plus \$5 per person. Write an expression to find the cost for any number (n) of people.

- A) $5n + \$100$
B) $20n + \$100$
C) $n + 5$
D) $20n + 5 + \$100$

- 9) Which expression has exactly 3 terms?

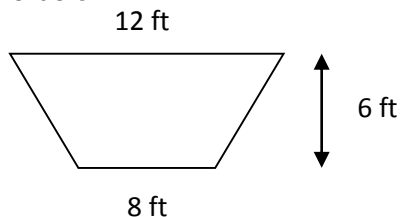
- A) $6x^3$ B) $6x-1$ C) $6x+3$ D) $6x^2+7x-1$

- 10) Evaluate $3 \cdot \left(\frac{1}{3}\right)^2$

- A) $\frac{1}{3}$ B) $\frac{1}{2}$ C) 1 D) 2

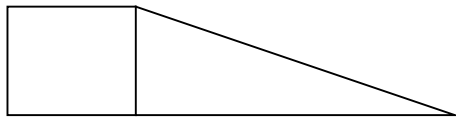
IV. Geometry

- 1) What is the area of the figure below?



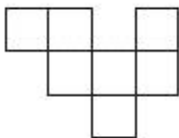
- A) 56 sq. feet
B) 60 sq. feet
C) 72 sq. feet
D) 36 sq. feet

- 2) A polygon is made up of a square and a triangle. The total area of the figure is 30 sq. cm. The area of the triangle is 14 sq. cm. What is the length of the side of the square?

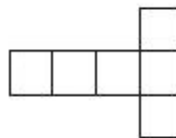


- A) Not enough information is given
B) 4 cm
C) 16 cm
D) 64 cm
- 3) Three coordinates of a quadrilateral are (5,3), (-5, 3) and (-5,-3). What are the coordinates of the fourth corner?
A) (0,5) B) (5,-3) C) (-3,5) D) (3,-5)

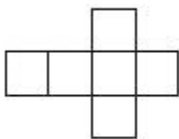
- 4) Which of the following nets will NOT make a cube?



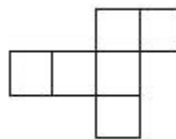
A)



B)

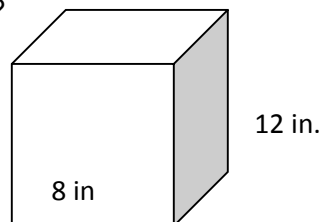


C)



D)

- 5) An open storage box is shaped below, but has no top. The base of the box is a square with a side length 8 in. and the height of the box is 12 in. What is the surface area of the box?

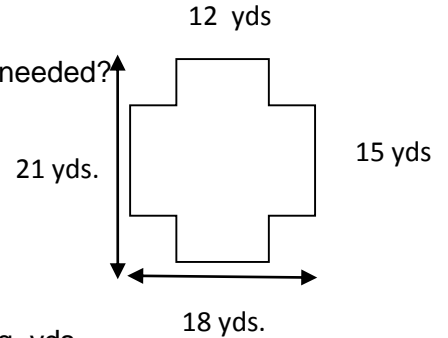


- A) 512 sq. in B) 640 sq. in.
C) 448 sq. in D) 144 sq. in

- 6) A child's sandbox is 6 ft. wide, 3 ft. long, and 2 ft. deep. The child's mother fills the sandbox so that it is $1\frac{1}{2}$ feet deep. What is the volume of the sand in the box?
- A) 27 cubic feet B) 36 cubic feet
D) $7\frac{1}{2}$ cubic feet D) 20 cubic feet

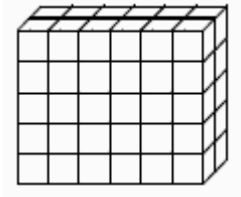
- 7) A rectangular pool is 12 feet long and 6.5 feet wide. If the volume of the water is 702 cubic feet deep, how deep is the water?
- A) 8.5 ft B) 9 ft.
C) 12 ft D) 7 ft.

- 8) The new playground below needs covering. How much covering will be needed?



- A) 342 sq. yds. B) 180 sq. yds
C) 378 sq. yds. D) 196 sq. yds.

- 9) What is the volume of the following figure?



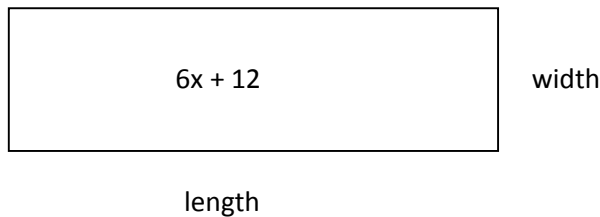
- A) 30 cubic units B) 60 cubic units
C) 12 cubic units D) 45 cubic units

- 10) What happens to the area of this rectangle when the sides are doubled?



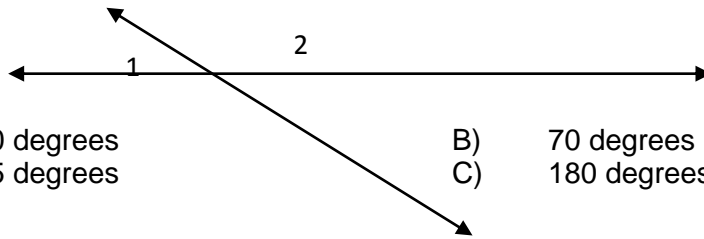
- A) The area is doubled.
B) The area is tripled.
C) The area is quadrupled
D) The area stays the same?

- 11) A rectangle has an area of $6x + 12$. What are the measurements of the length and width?



- A) width = $6x$ length = $(3 + 4)$
B) width = $6x$ length = $(3 + 12)$
C) width = 3 length = $(2x + 12)$
D) width = 3 length = $(2x + 4)$

- 12) If the measure of angle 2 is 105 degrees, what is the measure of angle 1 ?



- A) 60 degrees
 B) 70 degrees
 C) 75 degrees
 C) 180 degrees

V. Data and Statistics

- 1) The temperatures below were in the month of March. What is the outlier?

Year	Lowest Temperature
2001	12 °F
1999	18 °F
2005	0 °F
2003	15 °F
2002	13°F

- A) 12 °F B) 18 °F C) 0 °F D) 15 °F

- 2) The following test scores were scored in a math class.

80	72	80	80	82
92	84	80	96	70

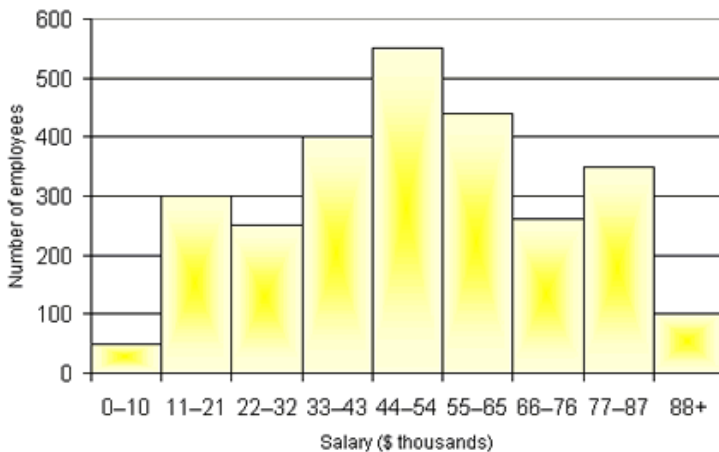
What is the range of the data?

- A) 72 B) 22 C) 26 D) 35

- 3) Sue found the following prices for purses: \$22, \$27, \$25, \$21, \$29, and \$25. Which measure of central tendency is most affected by adding another purse for \$40?

- A) median B) mode C) None, all will be the same. D) range

Use the data below to answer questions 4-5.



- 4) How many employee salaries are documented in the data?

- A) Less than 200 B) 44-54
 C) Less than 500 D) More than 600

- 5) Most employees make which salary?

- A) under 33 thousand dollars B) over 88 thousand dollars
 C) below 44 thousand dollars D) above 55 thousand dollars

- 6) The table shows the prices for parking at various beaches along the same coastline.

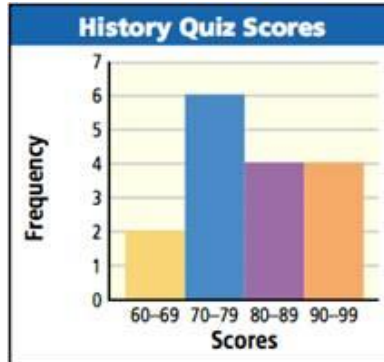
Beach Parking

\$2.50, \$3.75, \$ 1.25, \$2.25, \$3.00

Which of the following is the mean absolute deviation for the set of data?

- A) 25 cents B) 66 cents C) \$2.50 D) \$2.55

Use the histogram below to answer the following questions 7-8



- 7) How many students scored between 70 and 79 on their history quiz?

- A) 2 B) 6
C) 8 D) 16

- 8) How many scores are displayed on the histogram?

- A) 6 B) 16 C) 8 D) 10