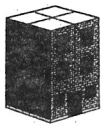
Pretest

The use of a calculator is NOT allowed on questions 1–18. Answer all questions completely.

1. Each office in the building shown in the graphic below is shaped like a cube and measures 14 feet on each side. There are 12 units in all. Find the volume of the whole office building. (Assume there is no basement.)



A. 2,352 cubic feet
B. 144 cubic feet
C. 2,744 cubic feet
D. 32,928 cubic feet

7.G.6 DOK 2

2. A cloud travels at the rate of $\frac{3}{4}$ of a mile in $\frac{1}{2}$ of an hour. How many miles per hour does this translate to?

A. $1\frac{1}{2}$ miles per hour
B. $1\frac{1}{4}$ miles per hour
C. $2\frac{1}{2}$ miles per hour
D. $\frac{3}{4}$ miles per hour

7.RP.1 DOK 2

3. Simplify: $(64 \div 4) + (42 \times 2) - 27$

A. 65
B. 73
C. 83
D. 63

7.NS.3 DOK 2

4. The Larson brothers started a lawn mowing business. They pool the money earned from the business, deduct the cost of the gasoline for the mower and edger, then split the profits accordingly. John gets 50%, Mark gets 30%, and Timothy gets 20%. If the brothers brought in $542 and had gasoline expenses of $38, how much money will Mark and Timothy each receive?

A. Mark: $151.20; Timothy: $151.20
B. Mark: $252.00; Timothy: $151.20
C. Mark: $151.20; Timothy: $100.80
D. Mark: $252.00; Timothy: $100.80

7.RP.3 DOK 3

5. If a woman makes $18.40 per hour and gets a 10% raise, how much per hour will she make then? Show your work and write your answer in the space provided.

_____

7.EE.3 DOK 2

6. Multiply: $(1 \times -1) \times (-1 \times 1)$

A. 2
B. 0
C. 1
D. –1

7.NS.2a DOK 1

7. What is the measure of an angle that is supplementary to an angle measuring 29°?

A. 151°
B. 141°
C. 41°
D. 331°

7.G.5 DOK 1

8. Billie is drawing a triangle with angles that measure 128° and 10°. What is the measure of the third angle in degrees?

A. 42°
B. 62°
C. 118°
D. 138°

7.G.2 DOK 1

9. Suppose the approximate area of a circle is 113 square inches. What is the approximate circumference of the circle? Use 3.14 for π. Round to the nearest hundredth.

A. 18.84
B. 36
C. 37.68
D. 38.2

7.G.4 DOK 2

10. Shari was trying to center a circular button to the exact center of a square decorative pillow. The pillow has sides measuring 14 inches, and the button has a diameter of 2 inches. What will the shortest distance between the edge of the button and the sides of the pillow be?

A. 6″
B. 7″
C. 12″
D. 13″

7.EE.3 DOK 2

11. Multiply: $-5 \times -5 \times -5$

A. 5^3
B. 5^{-3}
C. 125
D. –125

7.NS.2a DOK 1

12. Six students went to the school library, and each checked out one book. The books had the following numbers of pages:

188, 203, 225, 195, 284, and 198

What is the mean number of pages of the six books? Show your work and write your answer in the space provided.

_____ pages

7.SP.2 DOK 1

13. Myrna wants to place a 3-D sticker in the exact center of her notebook. The sticker is 2.5 inches wide, and the notebook is 9 inches wide. How wide will the space of the notebook be on each side of the sticker?

A. $3\frac{1}{4}$ inches
B. $3\frac{1}{2}$ inches
C. $6\frac{1}{4}$ inches
D. $6\frac{1}{2}$ inches

7.EE.3 DOK 2

14. A large container measures 4 feet by 8 feet by 10 feet. How many boxes that measure 1 foot by 1 foot by 2 feet could fit into this container? Show your work and write your answer in the space provided.

_____ boxes

7.G.6 DOK 2

15. Jeremy gets a weekly allowance of $10. He gets an extra $5 for every two-hour chore he does. Jeremy needs $35 to buy a new video game. Along with his allowance, how many chores will he need to do in one week to get enough money for the video game?

A. 0
B. 3
C. 5
D. 6

7.EE.4b DOK 2

16. Al has $30 in his wallet. He spends $17 on a video game and $13 at the bowling alley on 2 games and shoe rental. How much money is left in Al's wallet? Show your work and write your answer in the space provided.

_____

7.NS.1a DOK 2

17. Solve $8x + 17 = 41$ for x. Show your work and write your answer in the space provided.

_____

7.EE.1 DOK 2

18. The new road leading to a shopping mall has two 90° turns in it. On the map, showing where the road will be built, the first stretch of the road is 3.25 inches long, then turns left for 4.1 inches, and finally a right turn measuring 2.25 inches. If the scale on the map is 1 inch = 1,500 feet, how long will the new road be in feet?

A. 1,440
B. 1,590
C. 14,400
D. 15,900

7.G.1 DOK 2

This is the end of the calculator inactive test questions.

Directions:

1. **Look back over your answers for the calculator inactive questions. You will not be able to go back and work on these questions once you are given a calculator.**

2. **Raise your hand to let the teacher know you are ready to begin the calculator active test questions.**

3. **Do not begin work on the calculator active test questions until your teacher has given you a calculator.**

19. Once a hot air balloon is 900 feet in the air, it will travel at a rate of 4 miles per hour. How far will it travel in 2.25 hours?

A. 400 miles

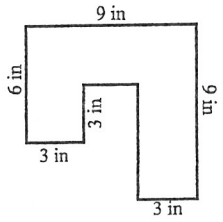
B. 4.5 miles

C. 9 miles

D. 90 miles

7.RP.1 DOK 2

20. The picture below is a drawing for a new deck at a restaurant. The scale is 1 inch = 6 feet. What will the area of the new deck be, once it is built?



A. 54 ft²

B. 324 ft²

C. 1944 ft²

D. 972 ft²

7.G.1 DOK 2

21. The distance between 3 and 9 on a number line is |6|. Which pair of equations below show this?

A. $|3 + 9| = 12; |9 - 3| = 6$

B. $|9 - 3| = 6; |3 - 9| = 6$

C. $|9 + 3| = 12; |3 + 9| = 12$

D. $|9 - 6| = 3; |12 - 9| = 3$

7.NS.1b DOK 1

22. Find the mean number of letters in the words of the following sentence.

"A triangle is a geometric figure."

A. 6

B. 4.5

C. 4.25

D. 6.5

7.SP.2 DOK 1

23. Which of the statements about angles is false?

A. Two angles are supplementary if the sum of their measures equals 180°.

B. Two angles are complementary if the sum of their measures is 90°.

C. Two angles are adjacent if the two angles share a ray and vertex, but do not overlap.

D. Two angles are complementary if the sum of their measures is less than 180°.

7.G.5 DOK 1

24. Convert the fraction $\frac{7}{8}$ into a decimal.

A. 0.7875
B. 0.865
C. 0.875
D. 0.815

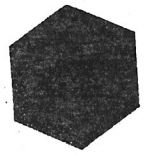
7.NS.2d DOK 1

25. Given that a fair six-sided number cube is rolled 300 times, about how many times can you expect to roll a 2 or a 4?

A. About 150 times.
B. About 200 times.
C. About 100 times.
D. About 50 times.

7.SP.6 DOK 2

26. Imagine making a vertical or perpendicular slice through the middle of the cube pictured below. What two-dimensional shape would the slice resemble?



A. rectangle
B. square
C. cube
D. rectangular prism

7.G.3 DOK 1

27. If Gayle can jog an average rate of 5 miles per hour, how far will she jog in 18 minutes?

A. 2 miles
B. 1.5 miles
C. 0.9 miles
D. 2.5 miles

7.RP.1 DOK 2

28. Mr. Mikoweiz and his family ate at a restaurant for dinner. The total for food and tax was $85.76. Mr. Mikoweiz wanted to leave a 15% tip of the total bill for the waiter. How much money should the waiter receive? Round your answer to the nearest tenth.

A. $12.80
B. $15.80
C. $8.60
D. $12.90

7.RP.3 DOK 2

29. The diameter of a circle is 8 inches. What is the circle's radius?

A. 16 inches
B. 64 inches
C. 4 inches
D. 8 inches

7.G.4 DOK 1

30. There are two cookie jars on a table. Jean may draw one cookie from each jar without looking. Using the table below, determine the probability that Jean will get a chocolate chip cookie from Jar A and a peanut butter cookie from Jar B?

Kind	Jar A	Jar B
Peanut-Butter	6	4
Chocolate Chip	8	11
Oatmeal Raisin	2	9

A. $\frac{1}{20}$
B. $\frac{1}{3}$
C. $\frac{1}{40}$
D. $\frac{1}{12}$

7.SP.7b DOK 2

31. An architect has a scale drawing of a room addition to his client's house. The drawing shows the room as 3.5 inches by 6.75 inches. The scale on the drawing shows 0.25 inches = 1 foot. What will the dimensions of the room be when it is built?

A. 16 feet by 28 feet
B. 12 feet by 24 feet
C. 35 feet by 67.5 feet
D. 14 feet by 27 feet

7.G.1 DOK 2

32. Mrs. Hayes has a rectangular garden that measures 12 feet wide and 20 feet long. She wants to increase the area of her garden by 40 square feet. Which of the scenarios below will give her the correct amount of additional space?

Area = length × width

A. She should increase the width by two feet.
B. She should increase the length by two feet.
C. She should increase the length by four feet.
D. She should increase the width by four feet.

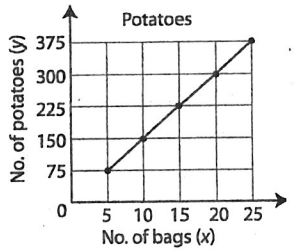
7.EE.4a DOK 2

33. The Tool and Hardware Store has an increase in sales of 7% over the same period, s, as last year. Which numerical expression below shows the sales for the current period?

A. $s - 0.07s$
B. $s + 1.07$
C. $1.07s$
D. $0.07s + 1$

7.EE.2 DOK 2

34. What does the coordinate point (10, 150) represent on the graph below?



A. 10 bags hold 150 potatoes
B. 150 bags hold 10 potatoes
C. 10 potatoes are in 15 bags
D. nothing

7.RP.2d DOK 1

35. A certain kind of fruitcake is packed 20 to a carton. Each fruitcake weighs 2.5 pounds. If someone has removed 8 of the fruitcakes from the carton, which expression shows how many pounds of fruitcake remain in the carton?

A. $(20 \times 2.5) - 8$
B. $(20 \times 2.5) - 2.5$
C. $(20 - 8) \times 2.5$
D. $(20 - 8) \times (8 \times 2.5)$

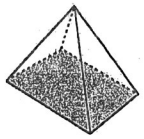
7.EE.2 DOK 2

36. The Water Fun Park showed an 18% loss of ticket sales from April of this year compared to sales, s, from April of last year. Which expression below shows this year's sales?

A. $s - 0.18s$
B. $s - 1.18$
C. $1.18s$
D. $0.18s - 1$

7.EE.2 DOK 2

37. Imagine slicing vertically through the middle of the rectangular pyramid pictured below. What two-dimensional shape would the slice resemble?



A. rectangle
B. square
C. triangle
D. rectangular prism

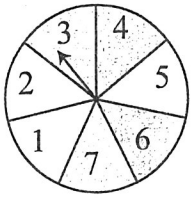
7.G.3 DOK 1

38. Mrs. Jackson took her three children to the beauty parlor to have their hair cut. The total bill was $45.00. She left the beautician a 20% tip. How much money did she leave the beautician?

A. $90.00
B. $7.75
C. $4.50
D. $9.00

7.RP.3 DOK 2

39. Bryan and Kirk each spin the spinner shown below one time. What is the probability that the two numbers added together will equal 10?



A. $\frac{5}{49}$
B. $\frac{1}{7}$
C. $\frac{5}{7}$
D. $\frac{1}{49}$

7.SP.8b DOK 2

40. Mr. McGarvey has to drive 275 miles, d, to his destination. If he drives an average of 50 miles per hour, m, which expression shows how many hours it will take to reach his destination? Also, how far has Mr. McGarvey driven if there are 3 hours left to drive to his destination?

A. $\frac{m}{d}$; 150 miles
B. $\frac{m}{d}$; 125 miles
C. $\frac{d}{m}$; 150 miles
D. $\frac{d}{m}$; 125 miles

7.RP.2c DOK 2

41. Which sentence best describes the expression below?

$$x + 0.4x = 1.4x$$

A. Adding 0.4 to x is the same as multiplying 0.4 by x.
B. Adding an additional $0.4x$ to x is the same as x multiplied by $4x$.
C. Multiplying x by 1.4 is the same as adding 0.4 to x.
D. Increasing x by 40% of x is the same as multiplying x by 1.4.

7.EE.2 DOK 2

42. If there is 1 robin for every 1 crow in a tree on Monday, and 2 robins for every 2 crows in a tree on Tuesday, would a line exhibiting this on a coordinate plane pass through the origin?

A. no
B. yes
C. cannot be determined
D. It would be a curve on the coordinate plane.

7.RP.2a DOK 1

43. Solve $16x - 23 = 57$ for x.

A. $x = 6$
B. $x = 4$
C. $x = 2.125$
D. $x = 5$

7.EE.1 DOK 2

44. An Internet company wants a random sample of 200 customers who purchased the company's new product. Which of the following methods provide a true random sample?

A. The company could call the last 200 customers to buy the product.

B. The company could randomly choose 200 customers on a list of customers who purchased the product.

C. The company could choose 200 customers whose names begin with the letters A through D from a list of customers who purchased the product.

D. The company could run a computer list of the customers who purchased the item and then returned the item to the company.

7.SP.1 DOK 2

45. Which of the statements about angles is true?

A. Two angles are supplementary if the sum of their measures is greater than 180°.

B. Two angles are complementary if the sum of their measures is 90°.

C. Two angles are supplementary if the sum of their measures is 90°.

D. Two angles are complementary if the sum of their measures is less than 180°.

7.G.5 DOK 1

46. Which choice shows three lengths that can be the lengths of the three sides of a triangle?

A. 9 inches, 10 inches, 20 inches

B. 4 inches, 5 inches, 9 inches

C. 1 inch, 1 inch, 3 inches

D. 7 inches, 21 inches, 25 inches

7.SP.8c DOK 2

47. There are 2 cats for every 3 dogs in a pet store in January, and 4 cats for every 6 dogs in February. Would a line exhibiting this on a coordinate plane pass through the origin?

A. no

B. yes

C. cannot be determined

D. No, the line would be a curve.

7.RP.2a DOK 1

48. The table below shows the cost of buying packages of paper at a local supply store.

Number of Packages (x)	Cost (y)
1	\$3.99
2	\$6.99
5	\$15.99
10	\$30.99

Which of the equations below shows the cost of the paper?

A. $y = \$3.99 \times x$

B. $y = \$3x \times \$0.99$

C. $y = \$3x + \$0.99$

D. $y = \$3.99x$

7.RP.2c DOK 2

49. Lila and Bella are both trying to do the math problem below. They each do the problem in different ways. Which two ways will give the correct answer?

$$42 + 54 + 33$$

A. $42 + 54 = 96 + 33 = 129$
$42 + 33 = 75 + 54 = 129$

B. $42 + 54 = 96 - 33 = 63$
$42 + 33 = 76 - 54 = 22$

C. $42 - 33 = 9 + 54 = 63$
$54 + 33 = 87 - 42 = 45$

D. $42 + 54 = 96 + 33 = 129$
$42 + 54 = 96 - 33 = 63$

7.NS.1d DOK 1

50. Wylan is testing the probability problems in his math book using colored marbles in a bag. He reaches in without looking, takes out a marble and records the result. After he replaces the marble, he repeats this procedure over and over. He has the following marbles in his bag: 2 white, 4 red, 7 yellow, and 8 green marbles. Which of the statements below is true about a single draw from the bag?

A. Wylan is most likely to draw a green marble from the bag and least likely to draw a red marble.

B. Wylan is most likely to draw a green marble from the bag and least likely to draw a white marble.

C. Wylan is most likely to draw a white marble from the bag and least likely to draw a green marble from the bag.

D. Wylan is most likely to draw a green marble from the bag and least likely to draw a yellow marble.

7.SP.5 DOK 3

51. Sammy bought some tomatoes on 3 different occasions and recorded the data below.

Pounds of Tomatoes	Total Cost
3.4	$6.29
1.6	$2.96
5.2	$9.62

What was the price per pound of tomatoes?

A. $1.85
B. $1.50
C. $1.65
D. $1.90

7.RP.3 DOK 3

52. Ms. Davis is a salesperson in the jewelry department of a retail store. She receives salary of $480 per 40 hour week, plus 3% commission on sales. If Ms. Davis needs $600 to meet all of her bills and expenses next week, which inequality shows the amount Ms. Davis needs to make in sales, s, this week?

A. $(\$600 - \$480) \div 0.03 \leq s$
B. $(\$600 - \$480) \times 0.03 \leq s$
C. $(\$600 - \$480) + \$120 \leq s$
D. $(\$600 - \$480) + (\$120 \times 0.03) \leq s$

7.EE.4b DOK 2

53. The area of a rectangular backyard is 14,300 square feet. One side of the rectangular backyard is 110 feet long. How long are the other three sides of the backyard?

A. The 3 remaining sides are 110 feet, 130 feet, and 130 feet.
B. The 3 remaining sides are 110 feet, 110 feet, and 110 feet.
C. The 3 remaining sides are 14,080 feet, 14,080 feet, and 110 feet.
D. The 3 remaining sides are 130 feet, 130 feet, and 130 feet.

7.EE.4a DOK 2

54. A computer program simulated tossing three coins 100 times. The results are shown below.

(H = heads, T = tails)

HHH	10
HTH	15
HHT	12
THH	12
HTT	13
THT	8
TTH	18
TTT	12

Based on the computer simulation, what is the experimental probability of tossing three heads?

A. $\frac{1}{9}$
B. $\frac{10}{9}$
C. $\frac{1}{100}$
D. $\frac{1}{10}$

7.SP.8c DOK 2

55. Matthew currently earns $5.50 an hour babysitting. After the first of the year, he will raise this rate by 9%. What is the amount of increase per hour, rounded to the nearest cent, and what is the new hourly rate Matthew will charge his customers?

A. Increase of $0.56 per hour and a new hourly rate of $6.50
B. Increase of $0.50 per hour and a new hourly rate of $6.00
C. Increase of $0.50 per hour and a new hourly rate of $6.45
D. Increase of $0.50 per hour and a new hourly rate of $7.00

7.EE.3 DOK 3

56. Two classes of 7th graders are having a friendly competition to see who can collect the most aluminum cans to raise funds for the technology center in the school. The results of number of cans collected the first five days are shown in the table below.

Day	Class 1	Class 2
Monday	232	331
Tuesday	457	622
Wednesday	389	210
Thursday	507	344
Friday	601	512

What are the median numbers of the collections of the two classes in the table above?

A. Class 1: 457; Class 2: 210
B. Class 1: 437; Class 2: 404
C. Class 1: 457; Class 2: 344
D. Class 1: 389; Class 2: 512

7.SP.4 DOK 1

57. Shawna wants to find a carton large enough to hold 12 plastic shoe boxes that measure 14 inches long by 5 inches high by 6 inches wide. The boxes must lay in the bottom of the carton 2 shoe boxes by 3 shoe boxes, and the carton should be 10 inches high. What measurements will the carton have?

A. 10 in high, 28 in long, 18 in wide OR 10 in high, 42 in long, 12 in wide
B. 10 in high, 28 in long, 12 in wide OR 10 in high, 42 in long, 18 in wide
C. 10 in high, 42 in long, 18 in wide OR 10 in high, 28 in long, 12 in wide
D. 10 in high, 28 in long, 18 in wide OR 10 in high, 42 in long, 18 in wide

7.G.6 DOK 3

58. Sam is selling used books online. The first book costs $8.00, the second and third books are each $7.00, the fourth and all other books, b, are $5.00. A buyer has $35 to spend before tax and shipping. Write an inequality to show how many books this customer may buy before the applicable taxes and shipping charges.

A. $8 + (2 \times 5) + (7 \times b) \leq \$35$
B. $7 + (2 \times 8) + (4 \times b) \leq \$55$
C. $8 + (2 \times 7) + (5 \times b) \leq \$35$
D. $5 + (2 \times 8) + (7 \times b) \leq \$53$

7.EE.4b DOK 2

59. The table below shows the cost of buying packages of paper at a local supply store.

Number of Packages (x)	Cost (y)
1	\$3.99
2	\$6.99
5	\$15.99
10	\$30.99

What is the unit rate shown in the table?

A. \$3.99
B. \$0.99
C. \$2.50
D. \$3.00

7.RP.2b DOK 1

60. The table below shows the cost of buying t-shirts on sale.

Number of Shirts (x)	Cost (y)
1	\$7.99
2	\$12.99
3	\$17.99
4	\$22.99
5	\$27.99

What is the unit rate shown in the table?

A. \$2.99
B. \$5.00
C. \$1.00
D. \$7.99

7.RP.2b DOK 1

61. Use the equation below to answer the question.

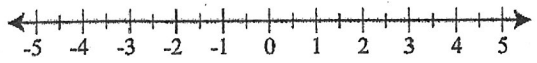
$$\frac{5}{6}\ x\ ? = -1$$

What is the missing number in the equation?

A. $\frac{-6}{5}$
B. $\frac{-5}{6}$
C. $\frac{-6}{-5}$
D. $\frac{-5}{-6}$

7.NS.2 DOK 2

62. The value of the expression $-\frac{15}{6}$ can be modeled by a point on the number line.



Put points at $-2\frac{1}{2}$, $\frac{-1}{2}$, $\frac{1}{2}$ and $2\frac{1}{2}$. Label above the points A,B,C, and D.
Which point on the number line most likely represents the value of the expression?

A. Point A
B. Point B
C. Point C
D. Point D

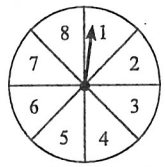
7.NS.2 DOK 2

63. Peggy will spend $\frac{1}{3}$ of her time working at the customer service desk. Each day she works 5.4 hours. How many hours will Peggy work the customer service desk each day?

A. $\frac{5}{9}$
B. $\frac{2}{5}$
C. $1\frac{14}{5}$
D. $\frac{11}{3}$

7.SP.7 DOK 2

64. The spinner shown is divided into 8 equal sections.



The arrow on the spinner is spun once. What is the probability that the arrow will land on a section labeled with a number 5 or greater?

A. $\frac{1}{8}$
B. $\frac{1}{4}$
C. $\frac{1}{3}$
D. $\frac{1}{2}$

7.NS.3 DOK 2

65. The table below shows the high temperature for each of 6 days in January. It also shows the difference between the high and low temperature for each day.

Daily Temperatures						
Day	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
High	2°F	10°F	12°F	5°F	-1°F	4°F
Difference	8°F	11°F	18°F	10°F	6°F	8°F

Select **all** the days that the temperature reached below – 4 degrees.

- ☐ **A.** Monday
- ☐ **B.** Tuesday
- ☐ **C.** Wednesday
- ☐ **D.** Thursday
- ☐ **E.** Friday
- ☐ **F.** Saturday

7.NS.3 DOK 2

66. Ella had 24 dollars. She spent 7 of these dollars. Select all the expressions that could be used to represent the number of dollars that Ella has now.

- ☐ **A.** 24 + 7
- ☐ **B.** –24 + 7
- ☐ **C.** 24 – 7
- ☐ **D.** –24 – 7
- ☐ **E.** 24 + (–7)
- ☐ **F.** –24 – (–7)

7.NS.1 DOK 2

67. What is the decimal equivalent of $\frac{8}{9}$?

A. 0.8
B. $0.\overline{8}$
C. 1.125
D. 1.13

7.NS.2 DOK 1

68. Which expressions are equivalent to $\frac{-7}{15}$? Select each correct answer.

- ☐ **A.** $\frac{7}{15}$
- ☐ **B.** $-\frac{7}{15}$
- ☐ **C.** $\frac{-7}{-15}$
- ☐ **D.** $\frac{7}{-15}$
- ☐ **E.** $-\left(\frac{7}{15}\right)$
- ☐ **F.** $-\left(-\frac{7}{15}\right)$

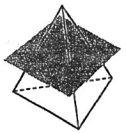
7.NS.2 DOK 1

69. Bob played two rounds of a game and after the second round, his score was less than –1.
He scored 15 points during the first round of the game. He scored p points during the second round of the game.
Which statement about p must be true?

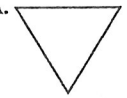
A. The value of p is 16.
B. The absolute value of p is 16.
C. The value of p is greater than 16.
D. The absolute value of p is greater than 16.

7.NS.1 DOK 2

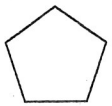
70. Use the diagram below to answer the question.

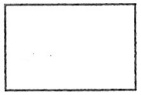


Which shape best represents the 2-dimensional shape formed by the slice made by the plane through the pyramid shown?

A.


C.

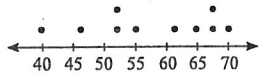

B.


D.


7.G.3 DOK 2

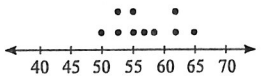
71. Alexis chose a random sample of 10 quart jars of dill pickles from each of two different brands, A and B. Each jar in the sample was the same size. She counted the number of pickles in each jar. Her results are shown in the plots.

Brand X



Number of Pickles

Brand Y



Number of Pickles

Based on the plots, which statement **best** compares the number of pickles in the jars from the two brands?

A. The number of pickles in jars from Brand A tends to be greater and more consistent than those from Brand B.

B. The number of pickles in Jars from Brand A tends to be greater and less consistent than those from Brand B.

C. The number of pickles in jars from Brand A tends to be fewer and more consistent than those from Brand B.

D. The number of pickles in jars from Brand A tends to be fewer and less consistent than those from Brand B.

7.SP.4 DOK 2

72. Maria has two boxes of apples.

- Box A contains a apples
- Box B contains 30% fewer apples than Box A.

The expression $a - 0.30a$ can be used to find the number of apples in Box B. Maria correctly simplifies the expression until it has just one term. What is the coefficient of a in Maria's simplified expression? Show your work and write your answer in the space provided.

7.EE.2 DOK 2

73. John is in charge of quality control for a company that produces toy trucks at 5 different factories in the Chicago area. Lately the company has been getting complaints about their toy trucks. John decided to call the factories and have the supervisor collect the first 20 trucks that come off the line Monday morning and ship them to his office. He intends to inspect them to see if he can figure out what is going wrong.

Part A: Describe the sample for this survey?

Part B: How could John improve the sampling of the toy trucks?

Part C: Was the sample random? Explain your answer.

Part D: The supervisor is motivated to only send great toy trucks. Is he the best person to collect the 20 trucks? Why or why not?

7.SP.1 DOK 2

This is the end of the 7th Grade EOG test.

Directions:

1. Look back over your answers for the calculator active questions.

2. Put all your papers inside your book and close your book.

3. Place your calculator on top of your book.

4. Stay quietly in your seat until your teacher tells you that testing is finished.