



DISTANCE LEARNING PACKET

6TH GRADE

MATH

DAY 1

BENCHMARK REVIEW for GA MILESTONES

1. Bryan answered 9 out of the 12 questions on his test. What percent of the questions did Bryan answer?

- A. 25% B. 55% C. 65% D. 75%

2. Kate has \$5 less than 3 times the amount Jess has. If Jess has x dollars, which expression represents the amount that Kate has?

- A. $3(x - 5)$ B. $3x - 5$ C. $5 - 3x$ D. $x - 3$

3. What is the value of this expression? $4 + 24 \div 2 - 3$

- A. 13 B. 11 C. 19 D. 17

4. Seth's truck uses 12 gallons of gas for every 180 miles he drives. How far can he drive with 9 gallons of gas?

- A. 140 miles B. 135 miles C. 45 miles D. 220 miles

5. At her job, Pam is paid \$16 per hour. When she drives her car to work, she is paid an additional \$0.27 per mile. Using the following expression, where h represents hours and m represents miles, how much is Pam paid on a day when she works $6\frac{1}{2}$ hours and drives 142 miles in her car?

$$16h + 0.27m$$

- A. \$142.43 B. \$142.34 C. \$142.00 D. \$139.34

6. Solve the following: $144 \div 2^x$ $x = 4$

- A. 18 B. 8 C. 12 D. 9

7. There are 120 students at the pep rally. 48 are girls. Write a ratio of boys to girls at the pep rally.

- A. 2 to 3 B. 5 to 2 C. 3 to 2 D. 2 to 5
-

Farmers Market

Item	# per box	price per box
Apples	4	\$3.44
Pears	12	\$6.72
Oranges	3	\$2.94

8. Based on this chart, what is the cost to buy 12 of each type of fruit?

- A. \$13.10 B. \$2.40 C. \$28.80 D. \$25.30
-

9. If \$20 of a \$250 budget is spent on gas each week, what percent is spent on gas each week?

- A. 8% B. 4% C. 20% D. 25%

10. Little Suzi caught 6 butterflies in 2 hours. At this rate how many butterflies will she catch in 8 hours?

- A. 18 B. 24 C. 6 D. 12
-

74, 68, 88, 82, 78

11. Mean _____ 12. Median _____ 13. Range _____

14. IQR _____ 15. Mode _____

DAY 2

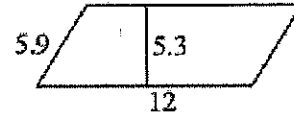
Study Guide 6th Grade Unit 6 (GA5)

1. Which measurement do you need to find...

CC.6.G.2

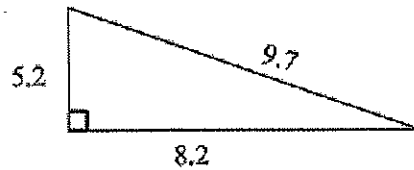
- ...how much paint will it take to paint the box? Volume or Surface Area?
- ...how much paint will it take to fill the paint tray? Volume or Surface Area?
- ...how much rice will fit in the box? Volume or Surface Area?
- ...how much leather will it take to cover the treasure box? Volume or Surface Area?

2. Find the area of the parallelogram.



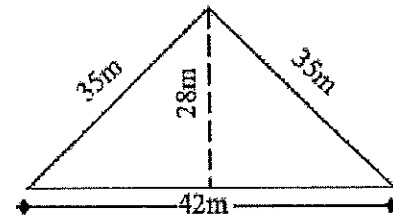
CC.6.G.1

3. Find the area.



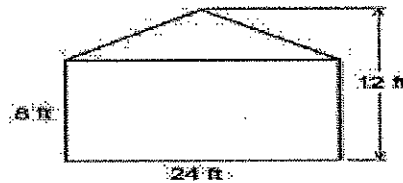
CC.6.G.1

4. Find the area of the *whole* figure.



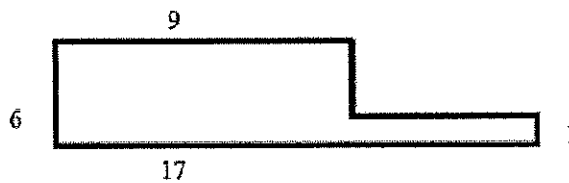
CC.6.G.1

5. Find the area of this 2-dimensional figure.



CC.6.G.1

6. Find the area of this figure.



CC.6.G.1

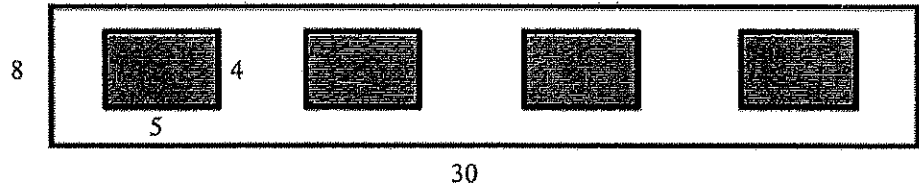
7. Draw a net for this figure.



CC.6.G.4

This wood needs to be painted. *Note: All cutouts are the same size.*

CC.6.G.1



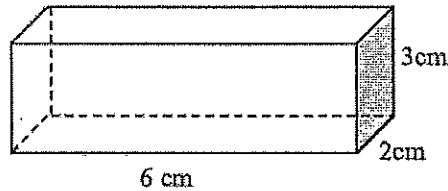
8. How many square feet need to be painted?
9. The paint costs \$4.25 per quart and will cover 25 square feet. How many quarts does Avery need?
10. How much will it cost to buy the paint?

11. Draw a net for this figure.



CC.6.G.4

12. Find the volume.



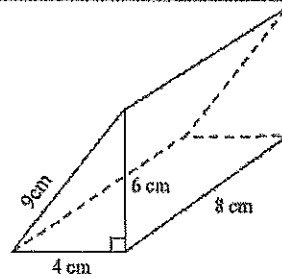
13. If the volume of a cube is 27 feet cubed, then what is the length of one side?

CC.6.G.2

14. Ted is hauling sand from the large pile to the new sandbox. Ted's wagon is 3.2 feet long, 2 feet wide, and 1.5 feet high. How many trips will Ted have to make before he has *at least* 35 cubic feet of sand for the sandbox?

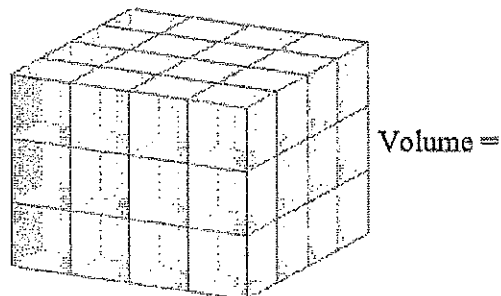
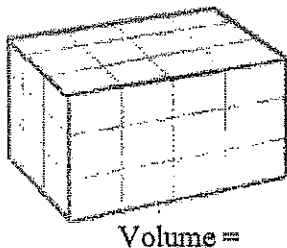
CC.6.G.2

15. Find the surface area of the prism.



CC.6.G.4

16. Find the volume of the rectangular prisms.



DAY 3

1. Write an expression that matches; "8 less than z". CC.6.EE.2

2. Which verbal expression matches: $4(z + 2)$? CC.6.EE.2

- A. four times z and add 2 B. four times the sum of z and 2 C. four and z and 2

3. Which expression equals 20? CC.6.EE.4

- A. $4^2 + 12$ B. $2^3 \cdot 3 + 2$ C. $8 + 4 \cdot 3 = 20$ D. $12 + 28 \div 2$

4. Simplify. $8^2 + 2$ CC.6.EE.1

5. Evaluate: $xy + z^2$; if $x = 5$, $y = 2$, and $z = 6$ CC.6.EE.2

6. Evaluate: $19 - 6 \cdot 2$ CC.6.EE.2

7. If $m = 100$ what is the value of q ? $q = 21.344 m$ CC.6.EE.2

- A. 213.44 B. 2,134.4 C. 21,344 D. 213,440

8. Simplify: $3^2 + 24 \div (5 - 3)$ CC.6.EE.1

9. Choose the expression that matches: "the product of p and 12". CC.6.EE.2

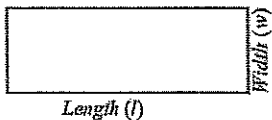
- A. $p + 12$ B. $p - 12$ C. $p \cdot 12$ D. $p \div 12$

10. Which expression that is equivalent to: $x + x$. CC.6.EE.4

- A. \sqrt{x} B. x^2 C. $2x$ D. xx

11. Evaluate $4z - 5y$; when $z = 8$ and $y = 3$. CC.6.EE.2

12. The distance around a rectangle is the perimeter. Choose the 2 expressions that show ways to find the perimeter. CC.6.EE.2



- A. $l \cdot w$ B. $2(l + w)$ C. $2l + 2w$ D. $2(l \cdot w)$

13. Which expression is equivalent to: $5(3x + 2)$. CC.6.EE.4

- A. $15x + 2$ B. $15x + 10$ C. $8x + 2$ D. $8x + 10$

For question #'s 14 - 19, choose from the following statements: NO C or D answers here!

CC.6.EE.3 and CC.6.EE.4

- A. Always true B. Never true

14. $a - b = b - a$

17. $ab = ba$

15. $a(b + c) = ab + ac$

18. $a + 0 = a$

16. $a \cdot 1 = a$

19. $a(0) = a$

Measure of Variability

1. Attendance at the science fair for the last eight years was 86, 72, 98, 106, 112, 64, 102, and 96.

Mean _____ Mode _____ Range _____ Median _____

Lower Quartile _____ Upper Quartile _____ Interquartile (IQR) _____

2. The table shows the record high temperatures for the first 10 days of January in New York.

January Date	1	2	3	4	5	6	7	8	9	10
Record High Temp (in °F)	62	68	64	66	64	72	64	65	64	60

Mean _____ Mode _____ Range _____ Median _____

Lower Quartile _____ Upper Quartile _____ Interquartile (IQR) _____

3. Zahra's bowling scores for her five games are 124, 150, 138, 172 and 135. What does Zahra need to bowl in her 6th game to have a mean score of 150?

4. Wayne jogged six days last week:

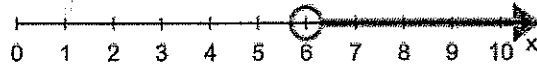
8 miles, 8 miles, 12 miles, 6 miles 13 miles, 7 miles

Mean _____ Median _____ Mode _____ Range _____

5. The Atlanta Falcons scored 42, 24, 31, 28, and 21 in the first five games this season. How many points do they need to score in the sixth game to have a mean (average) of 28 points?

Study Guide 6th Grade Unit 4

DAY 4



1. Write an inequality that describes the number line above.

CC.6.EE.8

2. Jon earns \$77 per week. Choose the expression below to help him find out how much he'll earn after x weeks.

A. $x + 77$

B. $77x$

C. $x - 77$

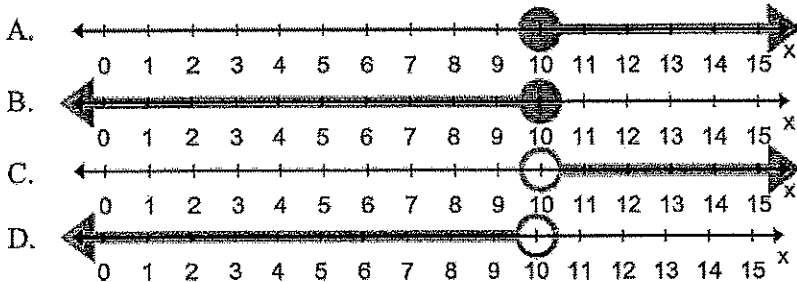
D. $77 + x$

3. Write an inequality that matches the statement "the temperature is more than 70° F".

CC.6.EE.8

4. Choose the graph below that illustrates "There must be fewer than 10 people in the van".

CC.6.EE.8



5. Jack has \$125 to spend. Used video games are \$15.50 each. Which equation could Jack use to find out how many games he can afford to buy?

CC.6.EE.6

A. $125x = 15.50$

B. $15.50x = 125$

C. $\frac{15.50}{x} = 125$

D. $125 + x = 15.50$

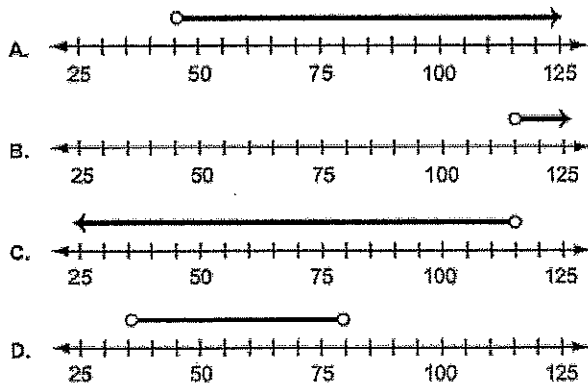
6. Each ride at the fair costs \$2.50. How much would it cost for 7 rides?

CC.6.EE.6

Rides, x	1	2	3
Money, y	2.50	5	7.5

7. Kate made \$20 last week and this week she knows she will make more than \$25. Which number line below shows all the possible amounts, in dollars, she will have at the end of next week?

CC.6.EE.8



8. The table shows Chilly's and Scooby's ages. Write an expression that represents Scooby's age in terms of Chilly's age.

CC.6.EE.9

Chilly's Age (x)	Scooby's Age (y)
12	17
13	18
14	19

9. Which of the following situations is represented by the equation $9c = 36$?

CC.6.EE.7

- A. Sue bought hats on sale for \$9 each. If she spent \$36 all together, how much did each hat cost?
- B. Kate has 9 dollars less than Ellen. If Kate is 36 inches, how much taller than Jana will she be?
- C. A hat costs \$36. During a sale, its price was reduced to \$9. By how much was the price of the hat reduced?
- D. Last week, Bob read for 36 minutes instead of just 9 minutes. How much more did he read?

10. The "All You Can Eat Buffet" is \$10 per person. Which equation could you use to find out how many people can eat for \$180?

CC.6.EE.9

- A. $x + 10 = 180$ B. $x - 10 = 180$ C. $10x = 180$ D. $180x = 10$

11. Use the information in the table to find the number of inches in 9 feet.

Feet	1	2	3	4	9
Inches	12	24	36	48	

CC.RP.3

12. Kay runs laps. Choose the numbers to complete the chart.

CC.RP.3

Number of Laps	2		6	8
Time (minutes)	6	12	18	

13. Based on the chart above, how long do you predict it will take Kay to run 10 laps?

CC.RP.3

14. Write an equation to represent the relationship between books and dollars.

<i>(b)</i> books	<i>(d)</i> dollars
1	5
2	10
3	15

CC.6.EE.9

15. Which of the following situations is represented by the equation $x - 5 = 21$?

CC.6.EE.7

- A. Dot had 5 old cupcakes and 21 new cupcakes. How many did she have all together?
- B. Pam had 21 cupcakes until Tom ate 5 of them. How many cupcakes does Pam have now?
- C. Tom ate 5 cupcakes and now there are only 21 left. How many cupcakes were there before Tom ate some?

16. Write an equation that represents the information in the table.

x	1	2	3	4
y	7	14	21	28

CC.6.EE.9

17. Dora bought 5 explorer shirts for \$124.78. Write an equation you could use to find out how much one shirt costs.

CC.6.EE.7

18. Which of the following does NOT make the inequality true? $x + 2 > 20$

- A. $x = 18$ B. $x = 19$ C. $x = 20$

CC.6.EE.5

19. Determine the solution to: $\frac{x}{3} = 9$.

CC.6.EE.5

20. Determine the solution to this inequality true: $4y > 24$

CC.6.EE.5

21. Find the solution for: $y + 31 = 67$

CC.6.EE.5

26. Which of the following makes this inequality true? $x + 8 < 21$

CC.6.EE.5

- A. 12 B. 13 C. 14

Study Guide 6th Grade
Unit 2 Troup County Schools

DAY 5

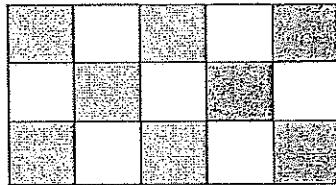
1. If the ratio of dogs to cats is 7 to 3, this means...

CC.RP.1

- A. For every 7 cats, there is one dog.
B. For every 7 cats, there are 3 dogs.
C. For every 7 dogs, there is one cat.
D. For every 7 dogs, there are 3 cats.

Use the diagram to answer questions 2, 3, and 4.

The new floor in the school hall is going to be constructed of square tiles that are either gray or white, in the pattern below.



2. What is the ratio of gray tiles to white tiles?

CC.RP.1

3. What is the ratio of white tiles to the total number of tiles in the pattern?

CC.RP.1

4. If the total cost of those white tiles is \$3.50, what is the unit cost per white tile?

CC.RP.2

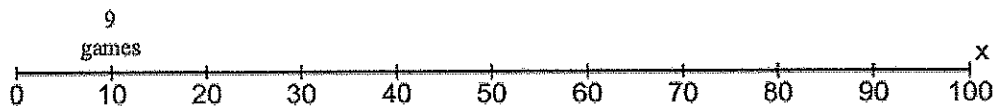
5. Apples are on sale 5 for \$3.15. At this rate, what is the cost of one apple?

CC.RP.2

6. Ally ate 240 grapes in 6 days. Which rate below is equivalent to Ally's rate?

CC.RP.2

- A. 60 grapes in 2 days A. 60 grapes in 3 days C. 120 grapes in 2 days D. 120 grapes in 3 days



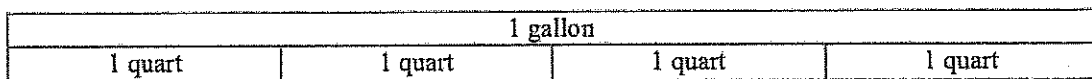
7. Deshun went to visit Zakia and he brought 9 video games, which is 10% of his collection. Using the number line above, determine how many video games Deshun has all together.

CC.6.NS.1

8. Use the information in the table to find the number of inches in 9 feet.

Feet	1	2	3	4	9
Inches	12	24	36	48	?

CC.RP.3



9. Use the tape diagram above to determine how many quarts are in $2\frac{1}{2}$ gallons.

10. The lawn mower says to mix 3 ounces of oil with 15 gallons of gasoline. How much oil would you use if you had 45 gallons of gasoline?

CC.RP.3

Use the chart to answer questions 11 & 12.

Number of Laps	2		6	8
Time (minutes)	6	12	18	

11. Kay runs laps. Choose the numbers to complete the chart. CC.RP.3
 A. 3 & 22 B. 3 & 24 C. 4 & 22 D. 4 & 24

12. Based on the chart above, how long do you predict it will take Kay to run 10 laps? CC.RP.3

13. The boat traveled 24 miles in 5 hours. How far should it travel in 1 hour? CC.RP.3

14. Abe spent \$144.00 for four bags of grass seed. How much did he spend on each bag? CC.RP.3

15. A simple recipe calls for 2 cups flour, 1 cup sugar, and $\frac{1}{2}$ cup butter. How many cups of flour are needed to mix with each cup of butter? CC.RP.3

16. If 4 is 25% of a value, what is that value? CC.RP.3

17. You and a friend baked 400 cupcakes together. If your friend baked 60% of the cupcakes, how many cupcakes did you bake? CC.6.RP.3

18. Beth has to do 20 math problems tonight. She has completed 20%. How many problems has she completed? CC.RP.3

19. Which point is at (3, 6)?
 A. point U B. point V C. point W D. point Z

20. Which answer below explains point U?
 A. He goes 1 mile in 1 minute. B. He goes 1 mile in 2 minutes.
 C. He goes 2 miles in 1 minute. D. He goes 2 miles in 2 minutes.

21. How long do you think it would take to go 16 miles?
 A. 8 minutes B. 16 minutes
 C. 24 minutes D. 32 minutes

