

Name: _____

summer math packet

8th Grade

Happy Summer!

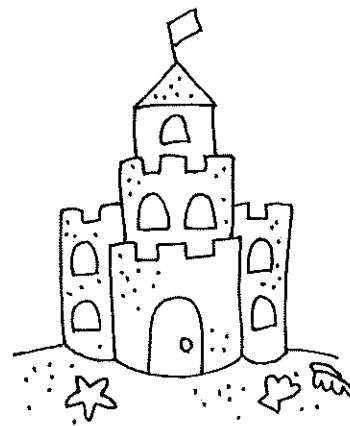
The goal of this math packet is to provide students with a few math problems per week to help combat the “summer slide”. This refers to students sliding backwards over the summer because math skills are not practiced weekly like they are during the school year. For some, it is very slight, but for others, it is a dramatic drop that takes weeks of catching up at the start of the school year. For this reason, students will have a packet to work on over the summer.

The packet is required to be completed over summer break, and this packet will be collected the first day of school. The packet will be checked for completion and looked over to make sure students worked through the problems and showed their work. This will be the first grade entered into the gradebook and will count as a quiz grade.

The intention of this packet is not to have students work on it ALL summer. Each week of the required work should not take more than 20-30 minutes. My goal is to help prevent the summer slide, not take up your entire summer! There are 10 weeks of review and we have 12 weeks of summer, so however you decide to complete the work is fine.

I do suggest that you complete small chunks throughout the summer, instead of going it all at the beginning or end of the summer. I would also suggest deciding what day or days you will like to work on the packet, and try to stay on that schedule. For example, “every Wednesday morning during the summer, I will spend 25 minutes working on my math packet. If I do not finish the work for the week, I will finish it on Thursday morning”. Finally, it might be helpful to use a timer and set it for 25 minutes, and have a plan to do something fun once you are done. For example, “once I spend 25 minutes working on my math packet, I will go outside and ride my bike”. This is also a great tool for students that need to practice time management and organization. It might even be better for your child or schedule to work on it for 5 minutes each weekday morning. Some weeks you might need to double up a week and that is fine. Whatever works best! I have provided a schedule on the back of this page to help you schedule time that works best for your family this summer. You may complete it at the start of the summer, or as you finish each week. Once you have completed the packet please sign the bottom (both student and parent). If you misplaced your packet, a digital copy will be provided via email.

Thank you for your support and
have a fantastic summer,
Mrs. Minnick



My Summer Math Packet Schedule

Week	Date or Dates Completed	If this week's work was difficult put an X	If you marked an X what was difficult? If not, leave this column blank.	Parent Initials
Example	6/3	X	Multi digit multiplication	
Week 1				
Week 2				
Week 3				
Week 4				
Week 5				
Week 6				
Week 7				
Week 8				
Week 9				
Week 10				

I understand that this packet is required work for the summer and will be going into the gradebook as a quiz grade. Failure to complete this packet will result in a zero in the gradebook and a mark on my accountability card. This packet was also completed to the best of my ability.

Student Signature: _____

Parent Signature: _____

Summer Math Review of 7th Grade WEEK I

1. $-4 + +6 =$

- A. -8
- B. 10
- C. -2
- D. 2

7.NS.1b

4. Solve for a

$$3a - 1 = 5$$

- A. $a = \frac{3}{5}$
- B. $a = 2$
- C. $a = 3$
- D. $a = \frac{5}{3}$

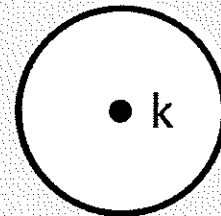
7.EE.4a

2. Which of the following is a factor of $10x + 5$?

- A. 5
- B. 10
- C. x
- D. 5x

7.EE.1

5. What is k?



- A. Chord
- B. Diameter
- C. Radius
- D. Center

7.G.4

3. $5\frac{1}{10} - 1\frac{7}{10} =$

- A. $3\frac{3}{5}$
- B. $6\frac{4}{5}$
- C. $3\frac{2}{5}$
- D. $3\frac{3}{10}$

7.NS.1d

6. What is the range for the following numbers?

5, 1, 12, 3, 4, 2, 10

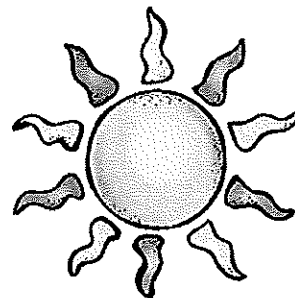
- A. 9
- B. 10
- C. 11
- D. 12

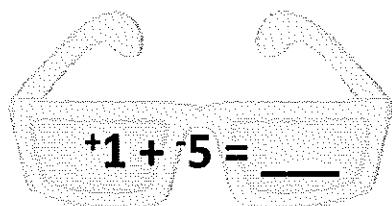
7.SP.4

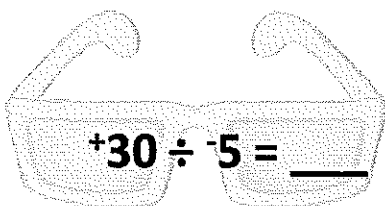
Summer Math - Integers WEEK 1

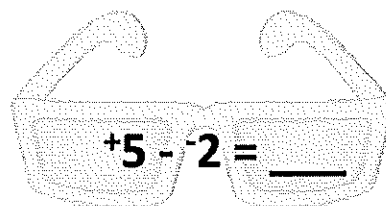
See how many questions you can answer correctly in 6 minutes. Use a timer to help keep time.

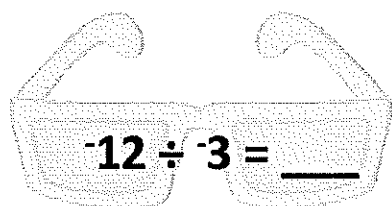
Write the number you completed correctly in the sun.

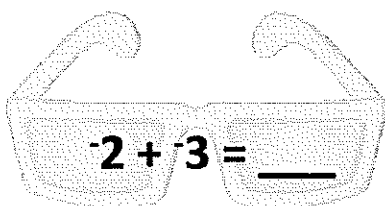


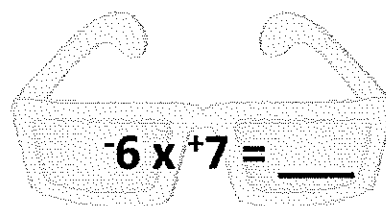

$$+1 + -5 = \underline{\hspace{2cm}}$$

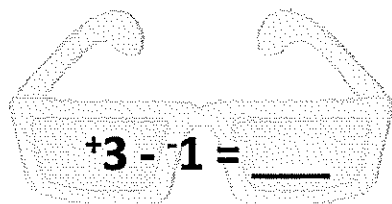

$$+30 \div -5 = \underline{\hspace{2cm}}$$

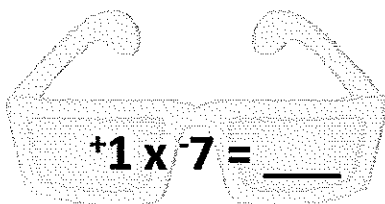

$$+5 - -2 = \underline{\hspace{2cm}}$$

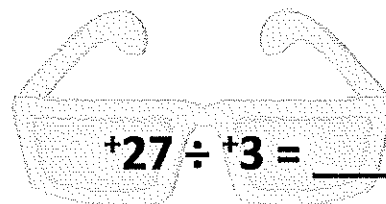

$$-12 \div -3 = \underline{\hspace{2cm}}$$

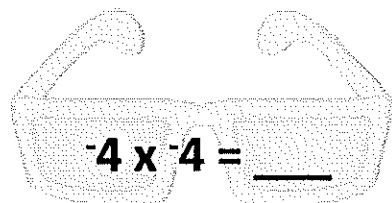

$$-2 + -3 = \underline{\hspace{2cm}}$$

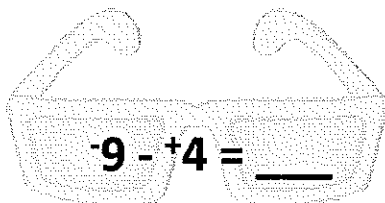

$$-6 \times +7 = \underline{\hspace{2cm}}$$

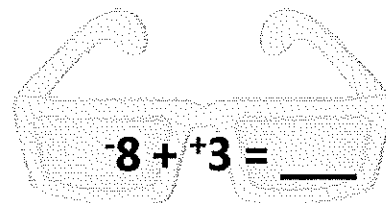

$$+3 - -1 = \underline{\hspace{2cm}}$$

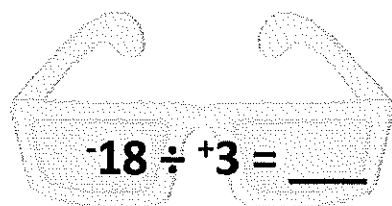

$$+1 \times -7 = \underline{\hspace{2cm}}$$

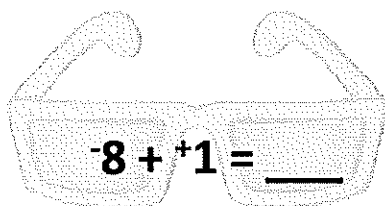

$$+27 \div +3 = \underline{\hspace{2cm}}$$

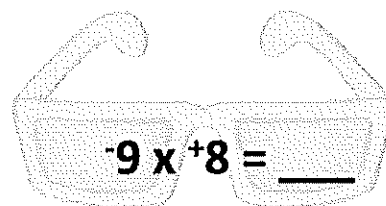

$$-4 \times -4 = \underline{\hspace{2cm}}$$

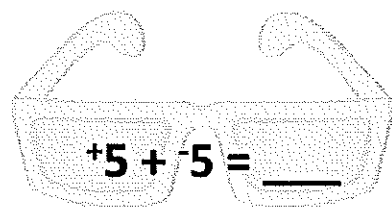

$$-9 - +4 = \underline{\hspace{2cm}}$$

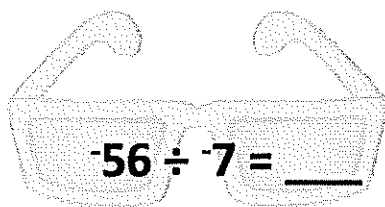

$$-8 + +3 = \underline{\hspace{2cm}}$$

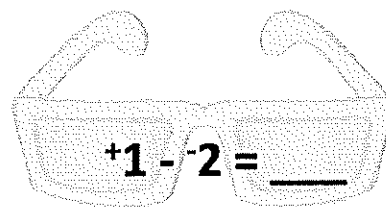

$$-18 \div +3 = \underline{\hspace{2cm}}$$


$$-8 + +1 = \underline{\hspace{2cm}}$$


$$-9 \times +8 = \underline{\hspace{2cm}}$$


$$+5 + -5 = \underline{\hspace{2cm}}$$


$$-56 \div -7 = \underline{\hspace{2cm}}$$


$$+1 - -2 = \underline{\hspace{2cm}}$$

Summer Math Review of 7th Grade WEEK 2

7. Jack made a scale drawing of the golf course. On the real golf course, the distance to the 8th hole is 360 yards. On his drawing, the distance to the 8th hole is 18 cm. What is the scale of Jack's drawing?

A. 1 cm = 20 yards
B. 20 cm = 1 yard
C. 1 cm = 15 yards
D. 15 cm = 1 yard

7.G.1

8. Using the following numbers, would the mode change if the number 19 was added?

24, 18, 22, 24, 19, 17, 24

A. No
B. Yes, the mode would change to 19
C. Yes, the mode would change to 20
D. Yes, the mode would change to 21

7.SP.4

9. A 4 lb. bag of salt water taffy from the beach costs \$15.12. What is the unit rate?

A. \$15.12/lb
B. \$3.78/lb
C. \$3.79/lb
D. \$3.77/lb

7.RP.1

10. $-9 - -3 =$

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

7.NS.1b

11. Taylor collected 4 white shells and 9 grey shells. If she put all the shells in a bucket and randomly pulled one out, what is the probability that the shell would be white?

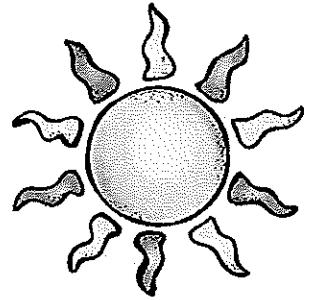
A. $\frac{9}{9}$
B. $\frac{9}{13}$
C. $\frac{4}{13}$
D. $\frac{4}{9}$

7.SP.5

Summer Math - Order of Operations with Integers WEEK 2

See how many questions you can answer correctly in 5 minutes. Use a timer to help keep time.

Write the number you completed correctly in the sun.



$$-4(3 \times -3) + 4 =$$

$$(-2)^2 + -5 =$$

$$(-5 - -3) \times 2 =$$

$$(-20 \div 5) + (-1)^2 =$$

$$(-2 - 1) \times (-5 - 3) =$$

$$3^2 - (-49 \div -7) =$$

$$(-3 \times 6) - -10 =$$

$$(-2)^3 - -10 =$$

$$(-4 + -6) \div (-5 - 0) =$$

Summer Math Review of 7th Grade WEEK 3

12. $3 \times -\frac{1}{8} =$

- A. $-\frac{3}{8}$
- B. $\frac{3}{8}$
- C. $\frac{8}{3}$
- D. 24

7.NS.2c

15. Which fraction is equivalent to $\frac{2}{3}$?

- A. $\frac{9}{12}$
- B. $\frac{5}{9}$
- C. $\frac{4}{5}$
- D. $\frac{4}{6}$

7.EE.3

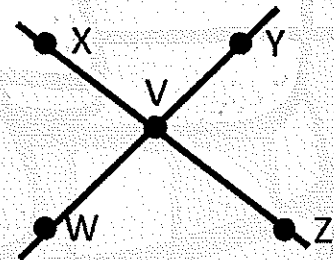
13. What is 80% of \$75?

- A. \$60
- B. \$15
- C. \$75
- D. \$6000

7.RP.3

16. Which angle is vertical to $\angle X V Y$?

- A. $\angle Y V Z$
- B. $\angle W V Z$
- C. $\angle X V W$
- D. $\angle Z V W$



7.G.5

14. Which expression is equivalent to $-5(k + 3)$?

- A. $5k + 15$
- B. $5k - 15$
- C. $-5k - 15$
- D. $-5k + 15$

7.EE.1

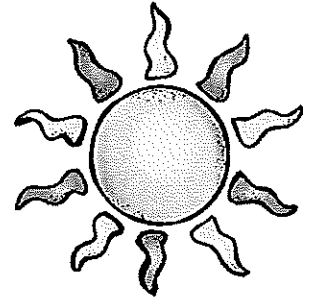
17. Marco surveyed the first 10 people who arrived at the pool. He asked them what they thought was the best time to close the pool. What type of sample is this?

- A. Representative
- B. Random
- C. Biased
- D. Basic

7.SP.1

Summer Math - Solving Equations WEEK 3

See how many questions you can answer correctly in 5 minutes. Use a timer to help keep time. Use the check to substitute your answer back into the question.



Write the number you completed correctly in the sun.

1. $a - 10 = 20$

Check:

2. $y + 5 = -10$

Check:

3. $4x + 3x = 14$

Check:

4. $36 = 9y - 3y$

Check:

Summer Math Review of 7th Grade WEEK 4

18. Which of the following is an equivalent ratio for 2:5?

- A. 5:2
- B. 4:15
- C. 4:10
- D. 6:20

7.RP.2a

21. $-9 \times -6 =$

- A. 63
- B. -63
- C. 54
- D. -54

7.NS.2a

19. Which integer represents growing 2 inches over the summer months?

- A. -2
- B. +2
- C. -1
- D. +1

7.NS.1c

22. Solve for c

$$2c - 3 > 5$$

- A. $c < 1$
- B. $c > 1$
- C. $c < 4$
- D. $c > 4$

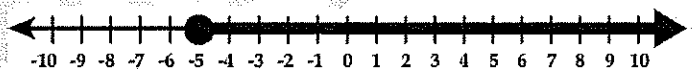
7.EE.4b

20. What is the absolute value of -19?

- A. 19
- B. -19
- C. 0
- D. There is no absolute value for -19

7.NS.1a

23. Which inequality does this number line show?

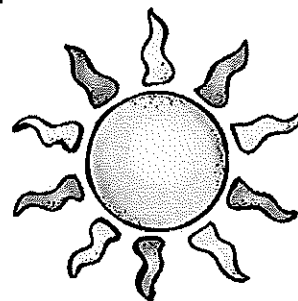


- A. $x \geq -5$
- B. $x > -5$
- C. $x \leq -5$
- D. $x < -5$

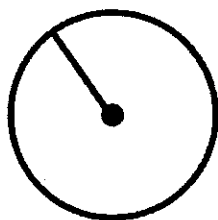
7.EE.4b

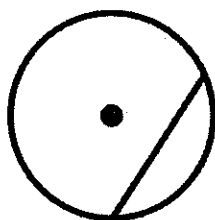
Summer Math - Circles WEEK 4

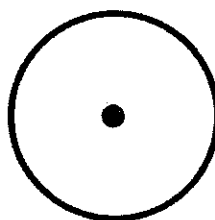
See how many questions you can answer correctly in 8 minutes. Use a timer to help keep time.
Write the number you completed correctly in the sun.

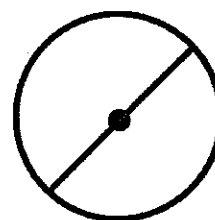


Use the correct word to describe what is shown in the circles below.
Your choices are chord, center, diameter, and radius.

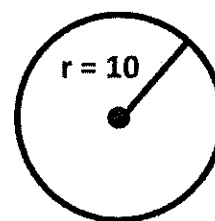
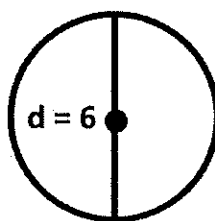
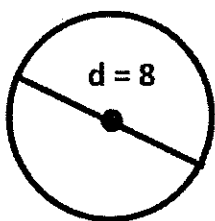
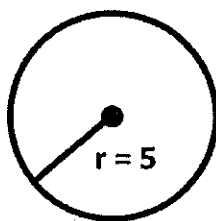




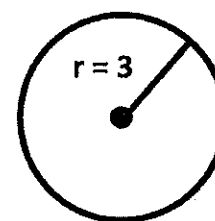
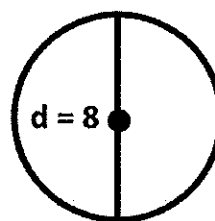
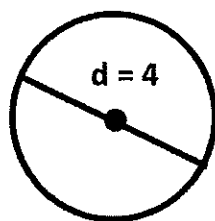
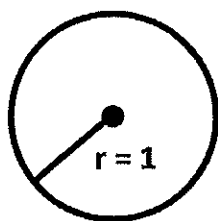




What is the circumference of the following circles? Use $\pi = 3.14$ and the formula $C = 2\pi r$

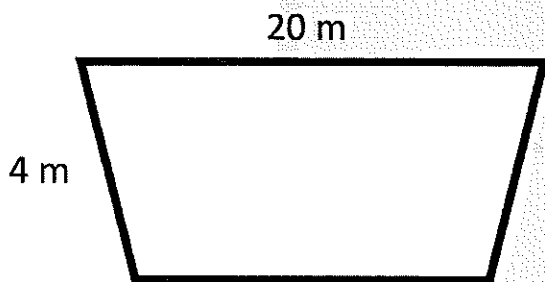
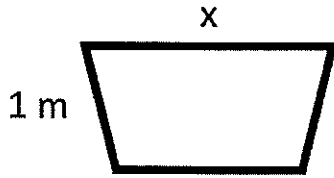


What is the area of the following circles? Use $\pi = 3.14$ and the formula $A = \pi r^2$.



Summer Math Review of 7th Grade WEEK 5

24. If these 2 shapes are similar, what is the length of x?



- A. 5 m
- B. 4 m
- C. 20 m
- D. 16 m

7.G.1

25. The diameter of the circle is 4 miles. What is the area of the circle? Use 3.14 for π .

- A. 6.28 miles²
- B. 25.12 miles²
- C. 12.56 miles²
- D. 50.24 miles²

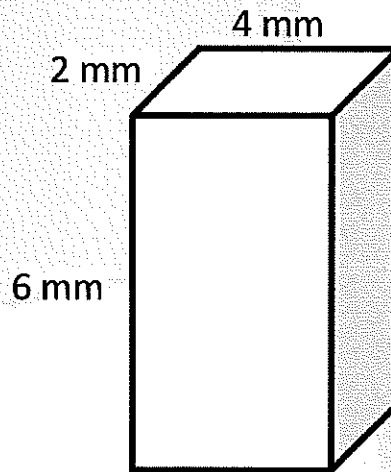
7.G.4

26. $-81 \div 9 =$

- A. -9
- B. +9
- C. -8
- D. +8

7.NS.2b & 7.NS.2

27. What is the surface area of this rectangular prism?



- A. 48 mm²
- B. 44 mm²
- C. 88 mm²
- D. 176 mm²

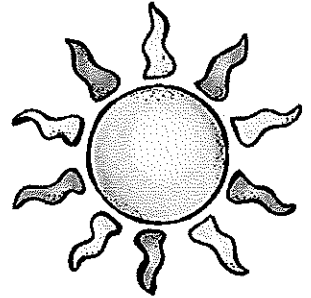
7.G.6

Summer Math - Mean, Median, Mode & Range

WEEK 5

See how many questions you can answer correctly in 5 minutes. Use a timer to help keep time.

Write the number you completed correctly in the sun.



Using the numbers below, what is the mean, median, mode, and range?

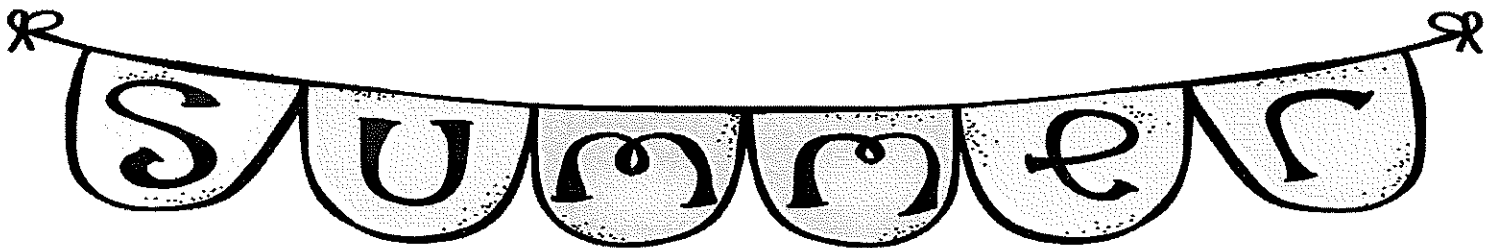
10, 10, 8, 7, 10

Mean: _____

Median: _____

Mode: _____

Range: _____



Using the numbers below, what is the mean, median, mode, and range?

14, 28, 33, 18, 33, 27, 13, 26

Mean: _____

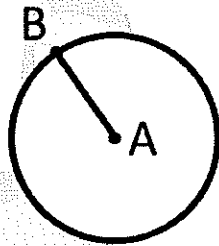
Median: _____

Mode: _____

Range: _____

Summer Math Review of 7th Grade WEEK 6

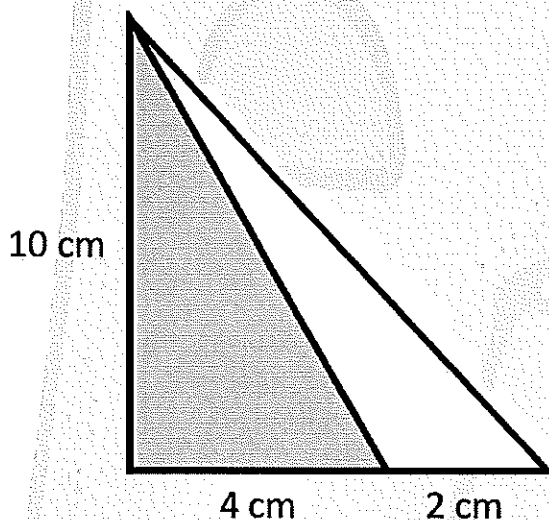
28. What is $\overline{AB}$?



- A. Center
- B. Chord
- C. Diameter
- D. Radius

7.G.4

29. What is the area of the shaded region?



- A. 20 cm^2
- B. 40 cm^2
- C. 30 cm^2
- D. 15 cm^2

7.G.6

30. This table shows the amount of money earned at a lemonade stand.

Glasses of Lemonade	2	4	6
Money Earned	\$1	\$2	\$3

How much money does one glass of lemonade cost based on the table above?

- A. \$1.50/glass
- B. \$1.00/glass
- C. \$0.50/glass
- D. \$2.00/glass

7.RP.2b

31. Your favorite soccer player scored 1 goal after taking 5 shots on goal. What is the experimental probability that he will score on his next shot on goal?

- A. $\frac{1}{10}$
- B. $\frac{1}{5}$
- C. $\frac{1}{25}$
- D. $\frac{1}{6}$

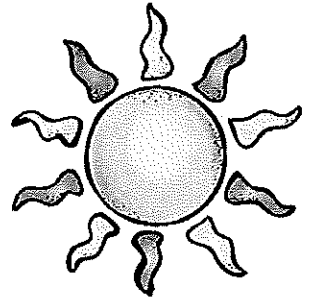
7.SP.6

Summer Math - 2 and 3 Dimensional Shapes

WEEK 6

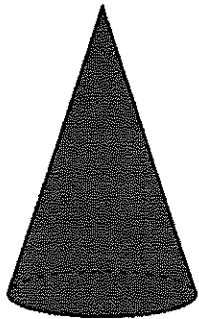
See how many questions you can answer correctly in 5 minutes. Use a timer to help keep time.

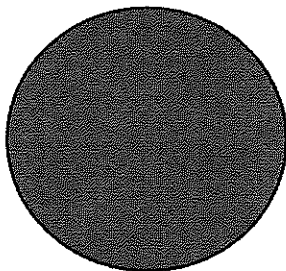
Write the number you completed correctly in the sun.

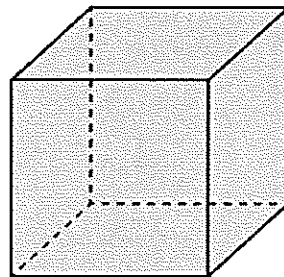


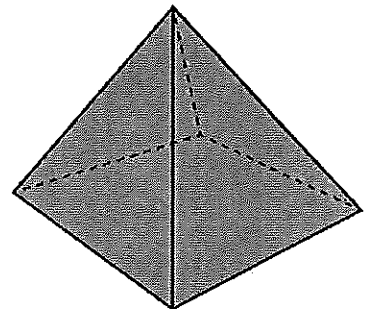
Describe the shapes below with the following words:

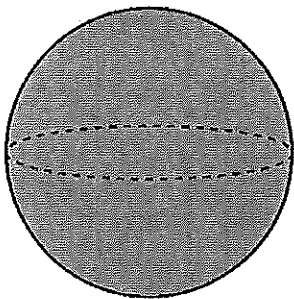
Cube, Square, Rectangle, Sphere, Cylinder, Trapezoid, Rectangular Prism, Pyramid, Triangular Prism, Triangle, Cone, and Circle.

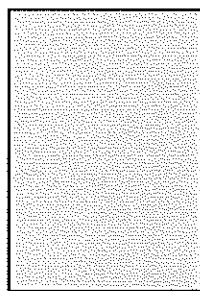


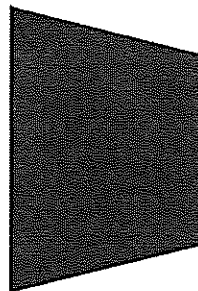


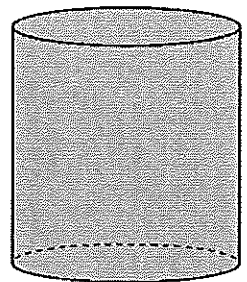


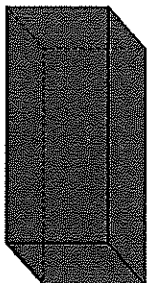


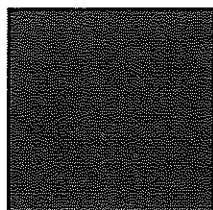


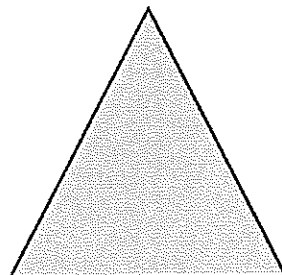


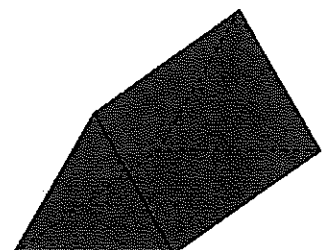












Summer Math Review of 7th Grade WEEK 7

32. What is the linear equation for these values of x and y ?

- A. $y = x + 1$
- B. $y = 2x - 1$
- C. $y = 2x$
- D. $y = 2x + 1$

x	y
0	1
1	3
2	5
3	7

7.RP.2c

33.
$$\begin{array}{r} 43.21 \\ - 18.54 \\ \hline \end{array}$$

- A. 24.66
- B. 24.67
- C. 24.57
- D. 24.56

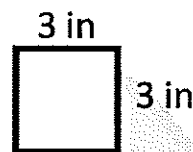
7.NS.1d

34. If you have a deck of 52 playing cards, what is the probability that you will draw a king?

- A. $\frac{1}{13}$
- B. $\frac{1}{52}$
- C. $\frac{4}{13}$
- D. $\frac{3}{52}$

7.SP.7a

35. You have a square with sides equal to 3 inches. If you double the length of the side, how does that affect the area?



- A. The area of the new square doubles.
- B. The area of the new square is halved.
- C. The area of the new square is 4 times the area of the old square.
- D. The area of the new square is 6 times the area of the old square.

7.G.1

36. Two girls are shopping for a gift for one of their mutual friends. They are shopping together to make sure they don't buy the same gift. Are these 2 events dependent or independent?

- A. These events are dependent.
- B. These events are independent.
- C. These events are both dependent and independent.
- D. These events are neither dependent or independent.

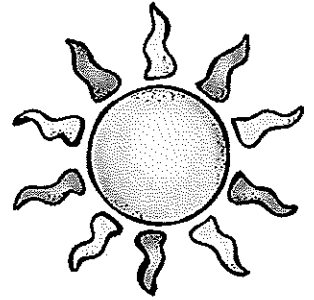
7.SP.8a

Summer Math - Multiplying & Dividing Decimals

WEEK 7

See how many questions you can answer correctly in 7 minutes. Use a timer to help keep time.

Write the number you completed correctly in the sun.



$$\begin{array}{r} 1.250 \\ \times 0.4 \\ \hline \end{array}$$

$$\begin{array}{r} 23.15 \\ \times 5.3 \\ \hline \end{array}$$

$$\begin{array}{r} 562.9 \\ \times 0.18 \\ \hline \end{array}$$

$$\begin{array}{r} 0.8097 \\ \times 0.94 \\ \hline \end{array}$$

$$2.4 \overline{) 2.24}$$

$$0.39 \overline{) 0.53}$$

$$0.78 \overline{) 0.7332}$$

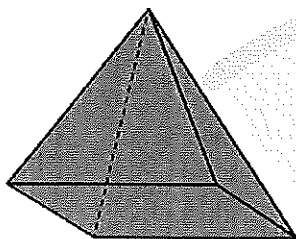
$$1.3 \overline{) 5.655}$$

$$25 \overline{) 4.65}$$

$$0.19 \overline{) 85.06}$$

Summer Math Review of 7th Grade WEEK 8

37. What is the name of this figure?



- A. triangular prism
- B. pyramid
- C. rectangular prism
- D. sphere

7.G.3

39. $0.775 \div 3.1 =$

- A. 250
- B. 25
- C. 2.5
- D. 0.25

7.NS.2c

38. To find out how many rabbits were in a park, students tagged 10 rabbits.

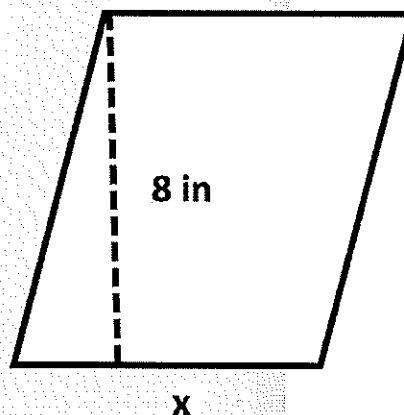
They later came back to the park and counted 200 total rabbits and 5 of them were tagged.

Using this information, what is the best estimate for the total number of rabbits in the park?

- A. 400
- B. 200
- C. 600
- D. 800

7.SP.2

40. If the area is 64 inches squared, what is the missing length?

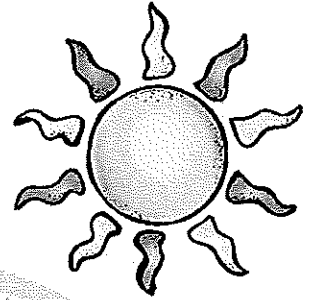


- A. $x = 8$ in
- B. $x = 16$ in
- C. $x = 4$ in
- D. $x = 9$ in

7.G.6

Summer Math - Fractions WEEK 8

See how many questions you can answer correctly in 7 minutes. Use a timer to help keep time.



Write the number you completed correctly in the sun.

$$3\frac{4}{5} + 1\frac{1}{10} = \underline{\hspace{2cm}}$$

$$8\frac{1}{9} - 3\frac{1}{3} = \underline{\hspace{2cm}}$$

$$4\frac{3}{4} + 1\frac{7}{8} = \underline{\hspace{2cm}}$$

$$2\frac{4}{5} \times 1\frac{3}{7} = \underline{\hspace{2cm}}$$

$$9\frac{1}{7} \times 6\frac{1}{8} = \underline{\hspace{2cm}}$$

$$13\frac{1}{2} \times 2\frac{2}{9} = \underline{\hspace{2cm}}$$

$$\frac{5}{8} \div \frac{10}{4} = \underline{\hspace{2cm}}$$

$$\frac{9}{5} \div \frac{81}{25} = \underline{\hspace{2cm}}$$

$$\frac{7}{16} \div \frac{49}{4} = \underline{\hspace{2cm}}$$

Summer Math Review of 7th Grade WEEK 9

41. $5\frac{1}{3} \div 1\frac{1}{3} =$

- A. $7\frac{1}{9}$
- B. $3\frac{1}{3}$
- C. $2\frac{2}{3}$
- D. 4

7.NS.2c

43. An angle has a measure of 25 degrees. What is the measure of a supplementary angle?

- A. 25 degrees
- B. 65 degrees
- C. 155 degrees
- D. 245 degrees

7.G.5

42. The snow cone truck sold 24 snow cones in the last hour. They sold the following amounts of each flavor:

Cherry	8
Orange	5
Grape	9
Lime	2

What is the experimental probability that the next snow cone sold will be cherry?

- A. $\frac{5}{24}$
- B. $\frac{1}{3}$
- C. $\frac{1}{12}$
- D. $\frac{3}{8}$

7.SP.7b

44. What is 3.25 as a fraction or mixed number in simplest form?

- A. $3\frac{1}{4}$
- B. $\frac{1}{4}$
- C. $\frac{325}{1000}$
- D. $\frac{3.25}{100}$

7.NS.2d

45. There are 5 blue beach balls and 5 red beach balls in a bin. You pick a beach ball at random and then put it back in the bin. Then you pick a second beach ball at random. What is the probability that you pick a blue then red beach ball?

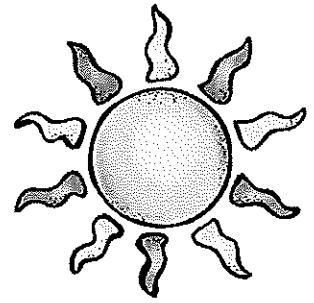
- A. $\frac{1}{4}$
- B. $\frac{5}{18}$
- C. $\frac{1}{10}$
- D. $\frac{1}{9}$

7.SP.8a

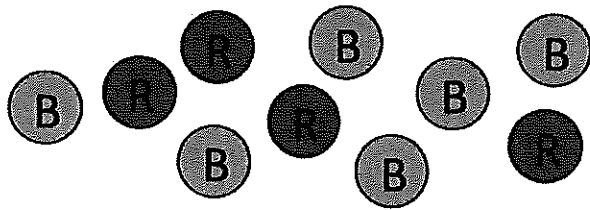
Summer Math - Probability WEEK 9

See how many questions you can answer correctly in 8 minutes. Use a timer to help keep time.

Write the number you completed correctly in the sun.



There are 10 marbles in a bag with the following colors.



What is the probability of picking a blue marble? $P(B) =$

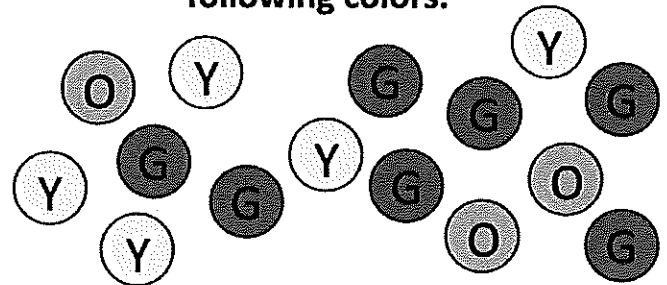
What is the probability of picking a red marble? $P(R) =$

What is the probability of picking a blue or red marble? $P(B \text{ or } R) =$

If you draw 1 marble then put it back and draw a second marble, what is the probability of picking a red marble then a red marble? $P(R), P(R) =$

If you draw 1 marble leave it out of the bag and then draw a second marble, what is the probability of picking a blue marble then a red marble? $P(B), P(R) =$

There are 15 marbles in a bag with the following colors.



What is the probability of picking an orange marble? $P(O) =$

What is the probability of picking a purple marble? $P(P) =$

What is the probability of picking a green or yellow marble? $P(G \text{ or } Y) =$

If you draw 1 marble then put it back and draw a second marble, then put it back and draw a third marble, what is the probability of picking an orange marble then a yellow marble, then another orange marble? $P(O), P(Y), P(O) =$

Summer Math Review of 7th Grade WEEK 10

46. During the game, you advance 4 spaces to the right and then move back 2 spaces to the left. If you started at 0, where did you finish?

A. -4
B. -2
C. +4
D. +2

7.NS.3

49. Simplify the expression:

$$4x + 3x - x$$

A. $7x$
B. $6x$
C. $5x$
D. $4x$

7.EE.1

47. Solve for y .

$$y - 5 = 4$$

A. $y = 5$
B. $y = 9$
C. $y = 4$
D. $y = -1$

7.EE.4a

50. The circumference of a circle is 18.84 cm. What is the radius? Use $\pi = 3.14$.

A. 3 cm
B. 4 cm
C. 5 cm
D. 6 cm

7.G.4

48. Calculate $\frac{5!}{2!}$

A. 3!
B. 120
C. 60
D. 30

7.SP.8b

51. Jeremy is painting his room over the summer. Here are 4 different wall colors and 3 different trim colors. How many different ways can he paint his room?

A. 7
B. 4
C. 12
D. 8

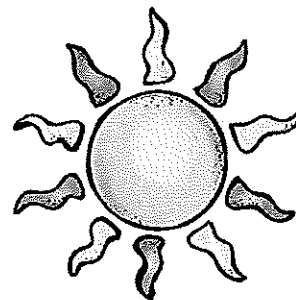
7.SP.8b

Summer Math - Fraction, Decimal, & Percent

WEEK 10

See how many questions you can answer correctly in 10 minutes. Use a timer to help keep time.

Write the number you completed correctly in the sun.



Fill in the table for the correct fraction, decimal or percent. If needed, round percent to the tenths place.

Fraction	Decimal	Percent
$\frac{1}{2}$		
	0.2	
		10%
	0.25	
$\frac{1}{8}$		
	0.75	
		33.3%
	0.4	
$\frac{1}{6}$		
		60%