

Incoming 8th Grade

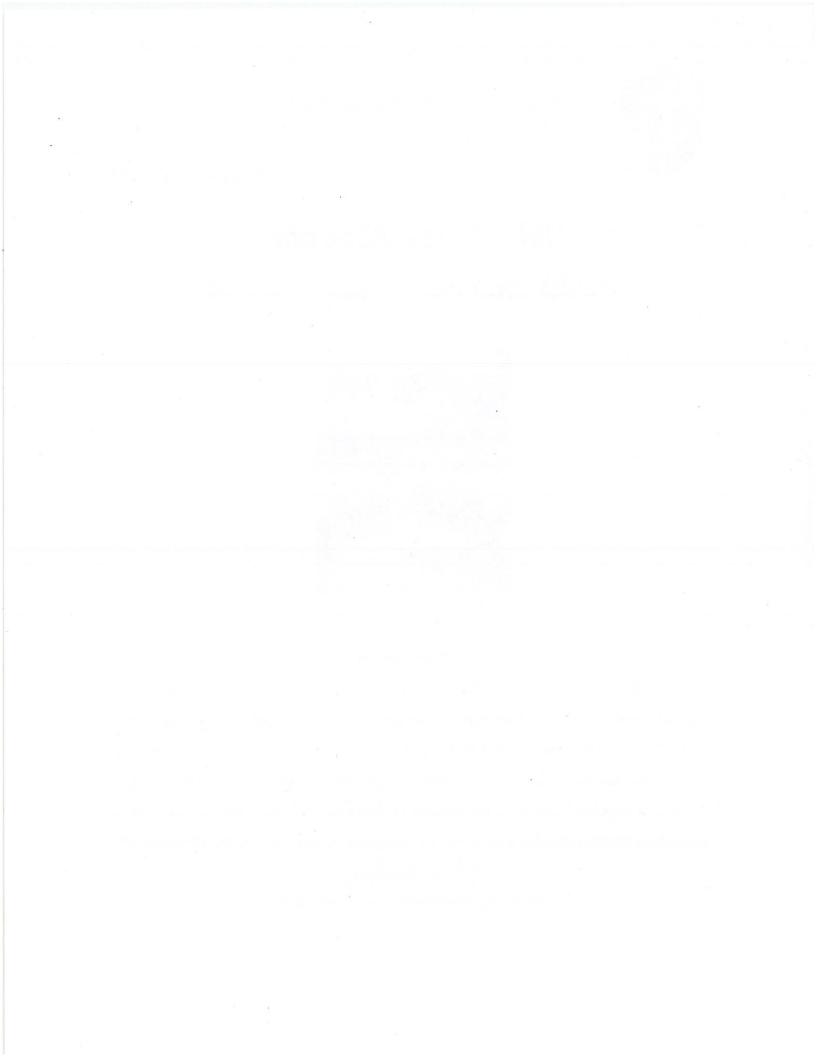
### Holy Cross Academy 2025 Summer Assignments



#### Dear Students:

Get ready to shine brighter than the sun! As we end another terrific school year and look forward to the sunny days of summer, our learning journey continues with the attached summer reading and math packets. Our summer assignments aren't just tasks; they are your passport to a summer filled with growth and enrichment. So, let's dive in together, embrace the warmth of learning, and make this summer one to remember! Please complete and bring the assignments with you on the first day of school in September.

Enjoy the many blessings of summer!



#### Summer Math - Integers WEEK I

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



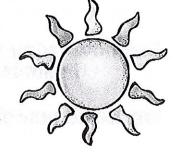
Write the number you completed correctly in the sun.

$$^{-}6 \times ^{+}7 =$$
\_\_\_\_

# 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.



$$^{-}4(3 \times ^{-}3) + 4 =$$

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

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

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

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

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

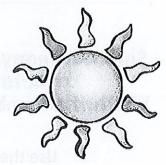
$$(-3 \times 6) - -10 =$$

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

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

### Summer Math - 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. 
$$a - 10 = 20$$

2. 
$$y + 5 = -10$$

Check:

Check:

$$3. 4x + 3x = 14$$

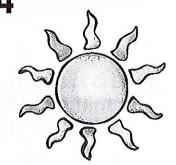
4. 
$$36 = 9y - 3y$$

Check:

Check:

#### 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.

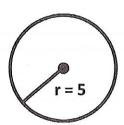


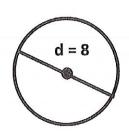


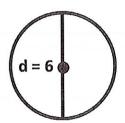


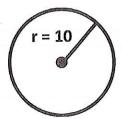


What is the circumference of the following circles? Use  $\Pi$  = 3.14 and the formula C =  $2\Pi r$ 

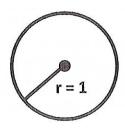


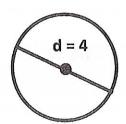


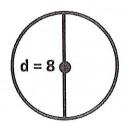


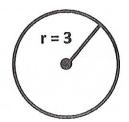


What is the area of the following circles? Use  $\Pi$  = 3.14 and the formula A =  $\Pi r^2$ .





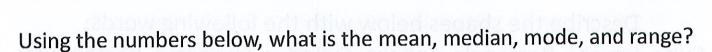




## Summer Math - Mean, Median, Mode & Range WEEK 5

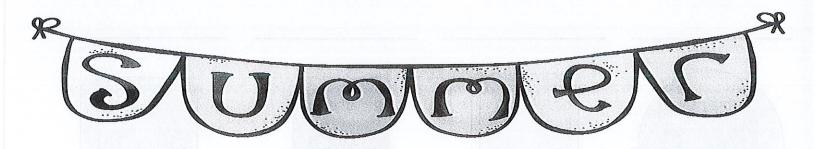
See how many questions you can answer correctly in 5 minutes. Use a timer to help keep time.

Write the number you completed correctly in the sun.



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

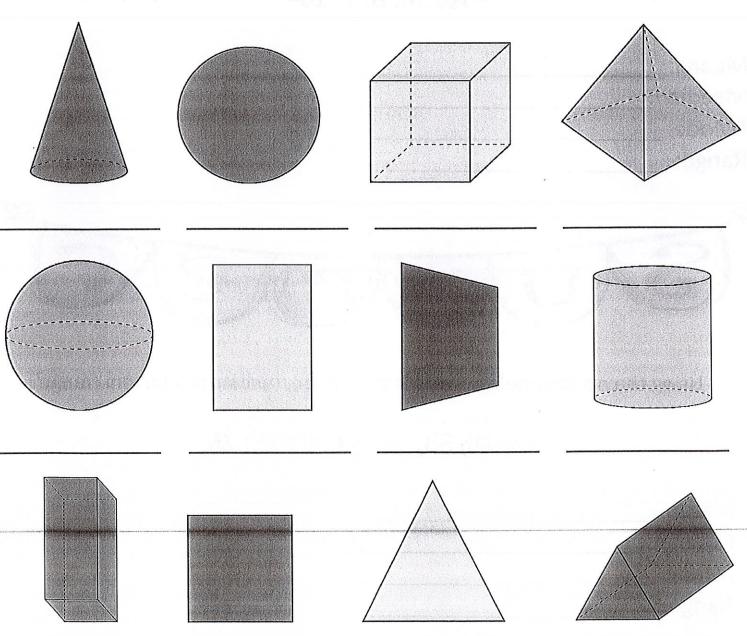
Mean:	7. \	
Median:		
Mode:		
Range:		

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 - Multiplying & Dividing Decimals

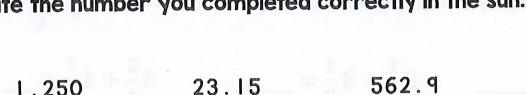
WEEK 7

X 0.18

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.

 $\times$  5.3



2.4/12.24

× 0.4

 $0.39\sqrt{10.53}$ 

 $0.78 \overline{)0.7332}$ 

0.8097

 $\times 0.94$ 

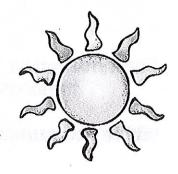
 $1.3\sqrt{5.655}$ 

 $25\sqrt{14.65}$ 

 $0.19\sqrt{185.06}$ 

#### 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.

$$3\frac{4}{5} + 1\frac{1}{10} =$$
  $8\frac{1}{9} - 3\frac{1}{3} =$   $4\frac{3}{4} + 1\frac{7}{8} =$ 

$$8\frac{1}{9} - 3\frac{1}{3} =$$
\_\_\_\_\_

$$4\frac{3}{4}+1\frac{7}{8}=$$
\_\_\_\_\_

$$2\frac{4}{5} \times 1\frac{3}{7} =$$
\_\_\_\_\_

$$9\frac{1}{7} \times 6\frac{1}{8} =$$
\_\_\_\_\_

$$13\frac{1}{2} \times 2\frac{2}{9} =$$
\_\_\_\_

$$\frac{5}{8} \div \frac{10}{4} =$$
\_\_\_\_

$$\frac{9}{5} \div \frac{81}{25} =$$
\_\_\_\_\_

$$\frac{7}{16} \div \frac{49}{4} =$$
\_\_\_\_\_

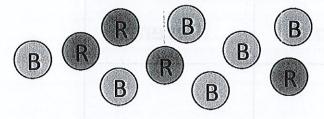
Summer Math - Probability WEEK 9

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) =

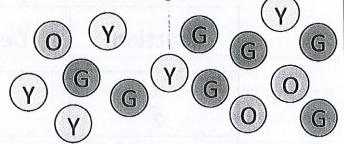
What is the probability of picking a red marble? P(R) =

What is the probability of picking a blue or red marble? P(B 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 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 - 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
1/2		
ne profesiolism of pro actives P(C)	0.2	god kin Tovystic
eloj i salidoras geor	religiority; (economic Storeligiority)	10%
	0.25	
<u>1</u> 8		
e Spiloni v versional rije	0.75	ti zi wiw aku Lizi wiw aku zi wiwaziw
1 to V 3		33.3%
	0.4	- 1
$\frac{1}{6}$		
		60%

A. -8

B. 10

C. -2

D. 2

4. Solve for a

3a - 1 = 5

**A.** 
$$a = \frac{3}{5}$$

B. a=2

C. a=3

**D.** 
$$a = \frac{5}{3}$$

7.NS.1b

7.EE.1

7.EE.4a

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

A. 5

B. 10

C. X

D. 5x

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.  $3\frac{3}{10}$ 

6. What is the range for the following numbers?

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

A. S

B. 10

C. 11

D. 12

- 7. Jack made a scale drawing of the golf course. On the real golf course, the distance to the 8<sup>th</sup> hole is 360 yards. On his drawing, the distance to the 8<sup>th</sup> 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?

- 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

- 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.  $\frac{9}{13}$
- $\mathbb{C}. \quad \frac{4}{13}$
- D.  $\frac{4}{9}$

12.	3×	$-\frac{1}{8}$

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

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

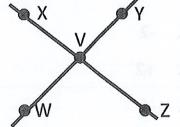
7.NS.2c

13. What is 80% of \$75?

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

16. Which angle is vertical to ∠XVY?

- A. ∠YVZ
- B. ∠WVZ
- C. ZXVW
- D. ∠ZVW



7.RP.3

7.G.5

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

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

- 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

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. <sup>-</sup>9 x <sup>-</sup>6 =
- A. 63
- B. -63
- C. 54
- D. -54

7.NS.2a

- 19. Which integer represents growing2 inches over the summer months?
- A. -2
- B. +2
- C. -1
- D. +1

22. Solve for c

$$2c - 3 > 5$$

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

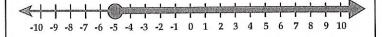
7.NS.1c

7.NS.1a

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

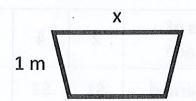
23. Which inequality does this number line show?

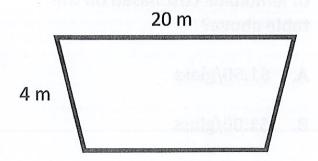


- A.  $x \ge -5$
- B. x > -5
- C.  $x \le -5$
- D. x < -5

7.EE.4b

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

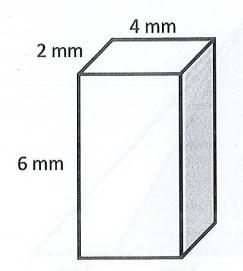
7.G.1

- 25. The diameter of the circle is 4 miles. What is the area of the circle? Use 3.14 for Π.
- A. 6.28 miles<sup>2</sup>
- B. 25.12 miles<sup>2</sup>
- C. 12.56 miles<sup>2</sup>
- D. 50.24 miles <sup>2</sup>

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

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

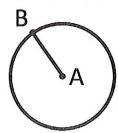
27. What is the surface area of this rectangular prism?



- A. 48 mm<sup>2</sup>
- B. 44 mm<sup>2</sup>
- C. 88 mm<sup>2</sup>
- D. 176 mm<sup>2</sup>

7.G.6

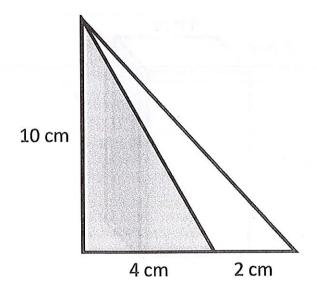
28. What is AB?



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

7.G.4

29. What is the area of the shaded region?



- A. 20 cm<sup>2</sup>
- B. 40 cm<sup>2</sup>
- C. 30 cm<sup>2</sup>
- D. 15 cm<sup>2</sup>

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.  $\frac{1}{5}$
- $\mathbb{C}. \quad \frac{1}{25}$
- D.  $\frac{1}{6}$

- 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	У
0	1
1 .	3
2	5
3	7

7.RP.2c

- 33. 43.21 - 18.54
- 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.  $\frac{1}{52}$
- $\mathbb{C}. \quad \frac{4}{13}$
- 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?

3 in 3 in

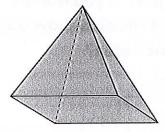
- A. The area of the new square doubles.
- B. The area of the new square is halved.
- C. The area of the new square is 4 times the area of the old square.
- D. The area of the new square is 6 times the area of the old square.

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

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

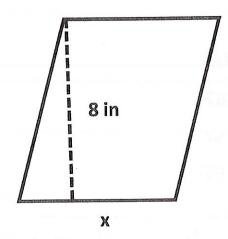
38. To find out how many rabbits were in a park, students tagged 10 rabbits.

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

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

7.NS.2c

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

- B.
- C.
- D. 4

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

- 25 degrees
- 65 degrees B.
- 155 degrees
- 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
N.D.A. Lime	2

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

- A.
- В.
- 325 C. 1000
- 3.25 D.

7.NS.2d

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

- 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?
- B.  $\frac{5}{18}$  C.  $\frac{1}{10}$

7.SP.8a

46.	During the game, you advance 4 spaces to the right and then moback 2 spaces to the left. If you started at 0, where did you finis	ve	9. Simplify the expression: 4x + 3x - x
A. B. C. D.	-4 -2 +4	A. B. C. D.	3. 6x C. 5x
47.	Solve for y. $y-5=4$		i0. The circumference of a circle is 18.84 cm. What is the radius? Use $\Pi = 3.14$ .
A.	y = 5	A.	A. 3 cm
В.	γ = 9	В.	3. 4 cm
C. D.	y = 4 y = -1	C.	
48. A.	Calculate $\frac{5!}{2!}$		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?
В.	120	A.	A. 7
C.	60	В.	B. 4
D.	30	C.	
		P.8b	7.SP.8b