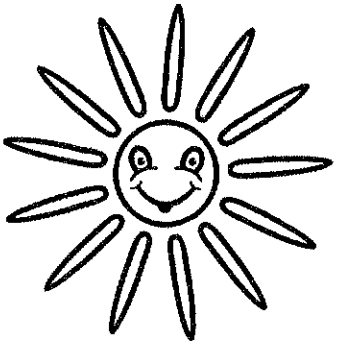
Grade 8

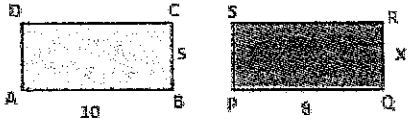


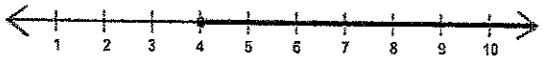
Summer Math 2024

Name: _____

G8 Math
Menu Choice Board

Part 1: *Choose activities from the project menu that equal $10 or more. Place an X in each box to show which activities you completed. Save your work for each item you complete, and take pictures when applicable. Keep everything together in a folder to submit when you return to school in the fall.*

Appetizer $2	Entrees $4	Desserts $3
Spinner for Data: Use a spinner that includes at least eight different numbers. Spin the spinner **10 times**, record the number you get each time. Then **find** the **mean**, **median**, **mode**, and **range** of the number set.	Elevation Project Pretend you love geology! Choose **15 countries** around the world **with the lowest land points. Calculate** the **difference** in land points with the country with the lowest land points to the country with the highest land points. Create a visual to share when we return to school in the fall (Google Slide presentation or poster).	Electoral College Go online and **find the number** of **electoral votes** for **each state. Create** a **dot plot** using the information you collected then **identify** the **median**, **mode**, and **range** of the data.
Let's Play Bingo Create a bingo game where players have to add or subtract decimals. You must **create one 5 x 5 bingo card** and **25 question cards** that include the answers.	Origami Fun Create a Ninja Transforming Star. 1. Watch the video and follow the directions on how to **create the Transforming Ninja Star** : https://www.youtube.com/watch?v=n01fsCDWAUc 2. Once the star is completed, **write a paragraph** about how **origami relates to math.** Remember to use math terms.	Picture Perfect You want to make a photo collage. The picture you have is 5 inches by 10 inches. You are going to **double, triple, and half** the picture. Name the dimensions for each new dimension. Make sure to include your work. Then solve the relationship below. 

Compare Websites Play **two** adding and subtracting integers online games. Click this link for the Math Playground game https://www.mathplayground.com/galaxypalsintegers.html and then click this link for the Math Game activity https://www.mathgames.com/play/mathmissile.html?quickplay=526a3cffd99f9800710000eb . After playing both games, **determine which you think is better and why. Record your response** either with a recorded video response or writing it down in your math notebook.	Create a Video Create a **video to teach** other students how to **find** the **volume** and **surface area** of a **triangular prism.** Make sure to include visuals of a triangular prism and formulas.	Temperature Table **Create** a **table** to show the **all-time** high and low temperatures in Fahrenheit of **10 cities in the United States**(your choice) Next, **calculate the range** in temperature for **each city.** Finally **identify** which city has the **smallest** temperature **difference** and which city has the **largest** temperature **difference**.
Jumping Dot Plot Jump and measure the distance you traveled **ten times. Record** the **data** in a **dot plot.** Determine the **mean** distance and the **range** of the data.	Carnival Rides Sign There are fifteen rides at the local carnival. Each ride has a different height requirement based on the danger of the ride. **Write fifteen inequalities** to represent which rides (**name the ride**) kids can go on for a sign that will be posted at the front of the carnival. Under each inequality, **graph it** on a number line. Example: Ferris wheel: $x \geq 4$ft  	Coordinate Plane **Create** a star using the following points: (1, 1), (3, 6), (5, 1) (1, 4), (5, 4), (1, 1) . After you draw the star, **reflect** it **over** the **y-axis** and then reflect it over the **x-axis**.

Part 2: Math Minute

Complete one Math Minute worksheet per week. Time yourself to see how long it takes to complete a Minute activity in the chart below.

Minute	Date	Time
Example	*June 13, 2022*	*1 minute 10 sec*
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

MINUTE 1

NAME _____

1. $6 \times 3 =$

2. How many ears do eight dogs have in all? _____

3. If $n + 2 = 7$, then $n =$

4. There were eight bugs on the ground. Now there are six. How many flew away? _____

5. $2 \times 3 \times 2 =$

6. $4 \times 6 +$ _____ $= 31$

7. 3, 6, 9, 12, _____, _____, _____

8. Seven bicycles have _____ wheels in all.

Use <, >, or = to complete questions 9 and 10.

9. 3 weeks _____ 20 days

10. 1 cm _____ 1 in.

MINUTE 2

NAME _____

1. $3 \cdot 5 =$

2. Four dollars equal _____ pennies.

3. $2 + 5 \cdot 2 =$

4. $5 + 8 - 3 =$

5. $\frac{6}{2} =$

6. 0, 4, 8, 12, _____, _____, _____

7. $0 \times 5{,}132 =$

8. $2\overline{)32}$

9. The product of four and three is _____.

10. The sum of five and four is _____.

MINUTE 3

NAME _____

1. The product of 4 and 6 is _____.

2. 2,463 x 0 =

3. 1, 10, 2, 9, 3, _____, _____, _____

4. $\frac{8}{4}$ =

5. $4\overline{)48}$

6. 8 + 6 ÷ 3 =

7. 3 + 4 • 3 =

8. How much does each apple cost? _____

9. 5 + (3 – 1) =

10. The difference between 9 and 5 is _____.

MINUTE 4

NAME _____

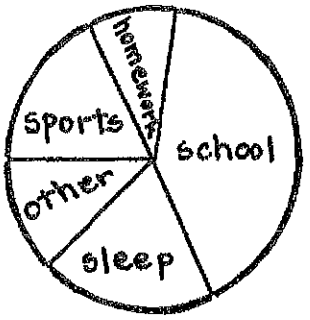
1. 1, 5, 9, 13, _____, _____, _____

2. $10 - 4 \cdot 2 =$

3. $\frac{18}{3} =$

4. $84 \div 1 =$

5. Does Ellen spend more time on homework or sports? _____



6. $4 \cdot 3 + 5 \cdot 1 =$

For questions 7–10, use $a = 2$, $b = 3$, and $c = 6$.

7. $a + b =$

8. $ac =$

9. $\frac{c}{a} =$

10. $2b =$

MINUTE 5

NAME _____

For questions 1–5, use $a = 8$, $b = 2$, and $c = \frac{1}{2}$.

1. $a + b =$

2. $b + c =$

3. $ab =$

4. $ca =$

5. $4a =$

6. $\frac{14}{2} =$

7. 1, 2, 4, 8, _____, _____, _____

8. The sum of 8 and 7 is _____.

9. The difference between 9 and 3 is _____.

10. $10 - 3 \cdot 3 =$

MINUTE 6

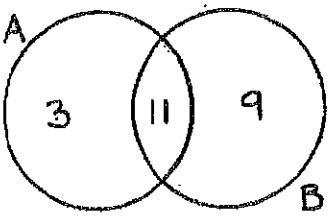
NAME _____

1. $4 \cdot 4 =$

2. $5^2 =$

3. $2 \cdot 2 \cdot 2 =$

4. Which number is in both A and B? _____



5. $10 - 5 \cdot 2 =$

6. $6^2 =$

7. $1 \cdot 1 \cdot 1 \cdot 1 =$

8. $\frac{10}{5} =$

9. Circle the answer that is equal to $5 \cdot 5 \cdot 5$:
   a. 5×3 b. 3×5 c. 5^3 d. 3^5

10. $3 + 5 =$

MINUTE 7

NAME _____

1. $8^2 =$

2. $4^2 - 6 =$

3. A trio and a quartet got together and played a song. How many musicians were there? _____

4. $2 + 3 \bullet 3 + 2 =$

5. $2\overline{)36}$

6. $10^2 =$

7. $\frac{1}{2} \bullet 10 =$

8. $3 \bullet 2 \bullet 1 =$

9. Circle the answer that is equal to 4^3:
   a. $4 \bullet 4 \bullet 4$ b. $4 \bullet 3$ c. $4 + 3$ d. $3 \bullet 3 \bullet 3 \bullet 3$

10. $\frac{4}{2} =$

MINUTE 8

NAME _____

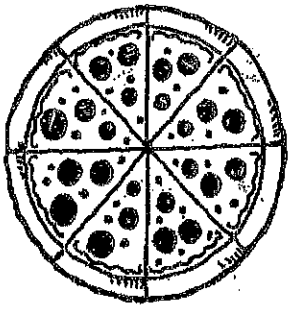
1. $3^2 =$

2. $\frac{18}{3} =$

3. Circle the answer that is equal to 5^3:
   a. 5×3 b. $3 \bullet 3 \bullet 3 \bullet 3 \bullet 3$ c. 3×5 d. $5 \bullet 5 \bullet 5$

4. If $8 + y = 15$, then $y =$

5. $15 + 3 \bullet 2 =$



6. Scott ate half of the pizza.
   How many pieces did he eat? _____

7. $\begin{array}{r} 35 \\ \times 35 \\ \hline \end{array}$

8. $\frac{1}{2} \times 12 =$

For questions 9 and 10, use $a = 5$ and $b = 2$.

9. $ab =$

10. $ba =$

MINUTE 9

NAME _____

1. $7^2 =$

2. If $4r = 24$, then $r =$

3. $\frac{15}{3} =$

4. $5(4 + 2) =$

5. $6 + 4 \cdot 2 =$

6. If $s - 8 = 9$, then $s =$

7. $\begin{array}{r} 45 \\ \times\ 45 \\ \hline \end{array}$

8. $2^3 =$

9. If there are fifty dimes in a roll of coins, then it is equal to _____ dollars.

10. The product of eight and nine is _____.

MINUTE 10

NAME _____

1. $\frac{1}{2}(20) =$

2. $\frac{20}{4} =$

3. $(4 + 4)^2 =$

4. The quotient of $3\overline{)27}$ is _____.

5. One half of fifty is _____.

6. 128, 64, 32, 16, _____, _____, _____

7. $256 \cdot 0 =$

For questions 8–10, use $a = 5$, $b = 4$, and $c = 2$.

8. $ac =$

9. $2a =$

10. $\frac{b}{c} =$