

Monroe Township Middle School

6TH GRADE MATHEMATICS

RESOURCE CLASS

PREPARATION PACKET



2026-2027

ALL PROBLEMS MUST BE COMPLETED IN PENCIL AND SHOW ALL WORK

The packet is a representation of the types of items you'll need to have mastered BEFORE 6th Grade Math, so we strongly encourage that you include this packet in your summer festivities!

You'll be responsible for handing in the completed packet with all work shown **ON THE FIRST DAY OF SCHOOL.**

FIRST/LAST NAME: _____

OPERATIONS AND ALGEBRAIC THINKING

1) Write a numerical expression for the product of eight and four.

2) Simplify the expression. Remember PEMDAS

$$(15 - 3) + 3 \times 4$$

3) Complete the table. Write a rule for completing the table:

Input	Output
4	28
5	35
8	56
	77
13	

Rule: _____

4) The table below shows the number of gallons of gasoline in the gas tank each second as it fills. If the pattern continues, how much gas will be in the tank after 6 seconds?

Seconds Pumping Gasoline	1	2	3	4	5	6
Gallons in the Tank	0.25	0.50	0.75	1.00		

NUMBER AND OPERATIONS IN BASE TEN

5) Write the number *five and twenty – three hundredths* in standard form.

6) Write 5^3 in standard form. _____

7) Megan's check for lunch at Luigi's Pizzeria was \$11.78. She paid with a \$20 bill. **How much change** did she receive?

8) Insert $>$, $<$ or $=$ to make the following statement true. 0.78 _____ 0.091

9) Write the following **words as decimals**:

Two hundred four and fifty seven thousandths _____

10) Round 164.361 to the nearest **tenth**. _____

11) Round 53.2403 to the nearest **hundredth**. _____

12) What is the **value** of the underlined digit in the number below?

85,024.290

NUMBER AND OPERATIONS – DECIMALS

Directions: Find the sum, difference, product, or quotient. **Show all work.**

13) $276 \div 12 =$

14) $8,452 \times 7 =$

15) $49 + 5.4 =$

16) $5,048 \div 2 =$

17) $6,295 - 273 =$

18) $4,000 - 742 =$

19) $3.98 \times 7 =$

20) $786 + 1,238 + 27 + 5 =$

NUMBER AND OPERATIONS – FRACTIONS

Directions: Find the sum or difference. Show all work and **SIMPLIFY** final answers.

$$21) \quad 2 - 1\frac{2}{3} =$$

$$22) \quad \frac{1}{3} + \frac{1}{4} =$$

$$23) \quad 1\frac{5}{8} - \frac{1}{3} =$$

$$24) \quad 1\frac{1}{4} + 2\frac{2}{3} =$$

25) Katie works 2 days a week after school. On Monday she works $3\frac{1}{2}$ hours and on Wednesday she works $4\frac{2}{3}$ hours. **How many more hours** does she work on Wednesday?

26) It takes $\frac{3}{4}$ cups of ice cream and $\frac{1}{2}$ cups of milk to make a milkshake. How many cups is that **altogether?**

27) Jimmy lives $\frac{7}{8}$ of a mile from school. Billy lives **twice as far** as Jimmy. How far does Billy live from school?

28) Three students shared a pizza. One student ate $\frac{2}{8}$ of the pizza, another ate $\frac{1}{4}$ of the pizza and the third student ate the rest. What fraction of the pizza was the third student's portion?

MEASUREMENT AND DATA

29) Leah is 48 inches tall and Carol is 4 feet 7 inches tall.

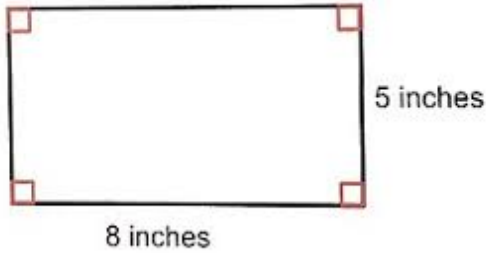
Which girl is taller?

12 inches = 1 foot

How much taller is she?

30) Find the area and perimeter of the rectangle below. **Label your answer.**

Area = $L \times W$ and Perimeter = $2L + 2W$ or add all sides

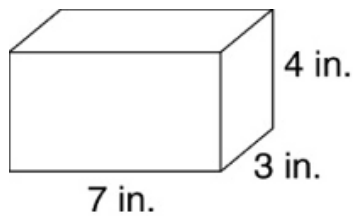


Show your work here.

Area =

Perimeter =

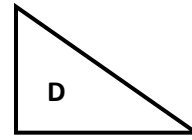
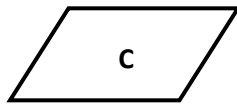
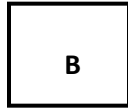
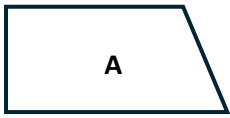
31) What is the volume of the figure shown? **Label your answer. ($V = l \times w \times h$)**



Show all work here.

GEOMETRY

32) Which quadrilateral has two acute angles, two obtuse angles, and two pairs of opposite parallel sides?



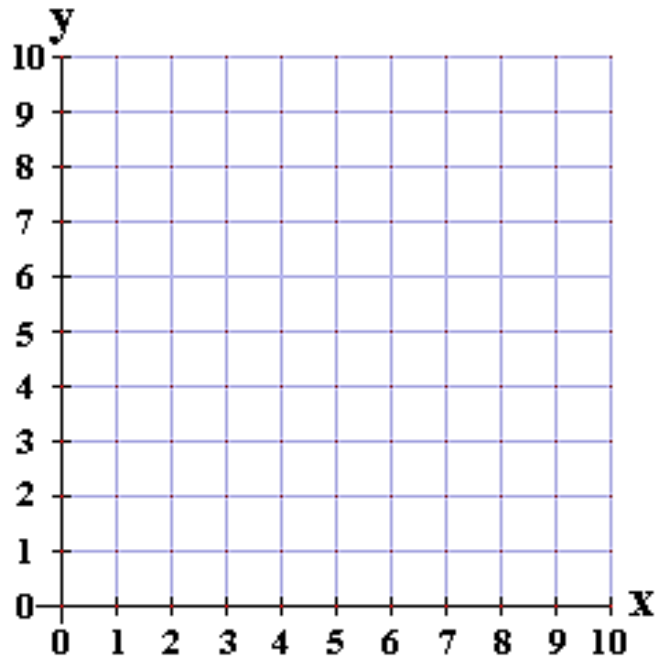
Name the selected shape above: _____

33) Plot **and** label the following points on the coordinate plane:

A (1, 5) **B** (2, 7) **C** (8, 3) **D** (6, 6)

• Label and connect the points.

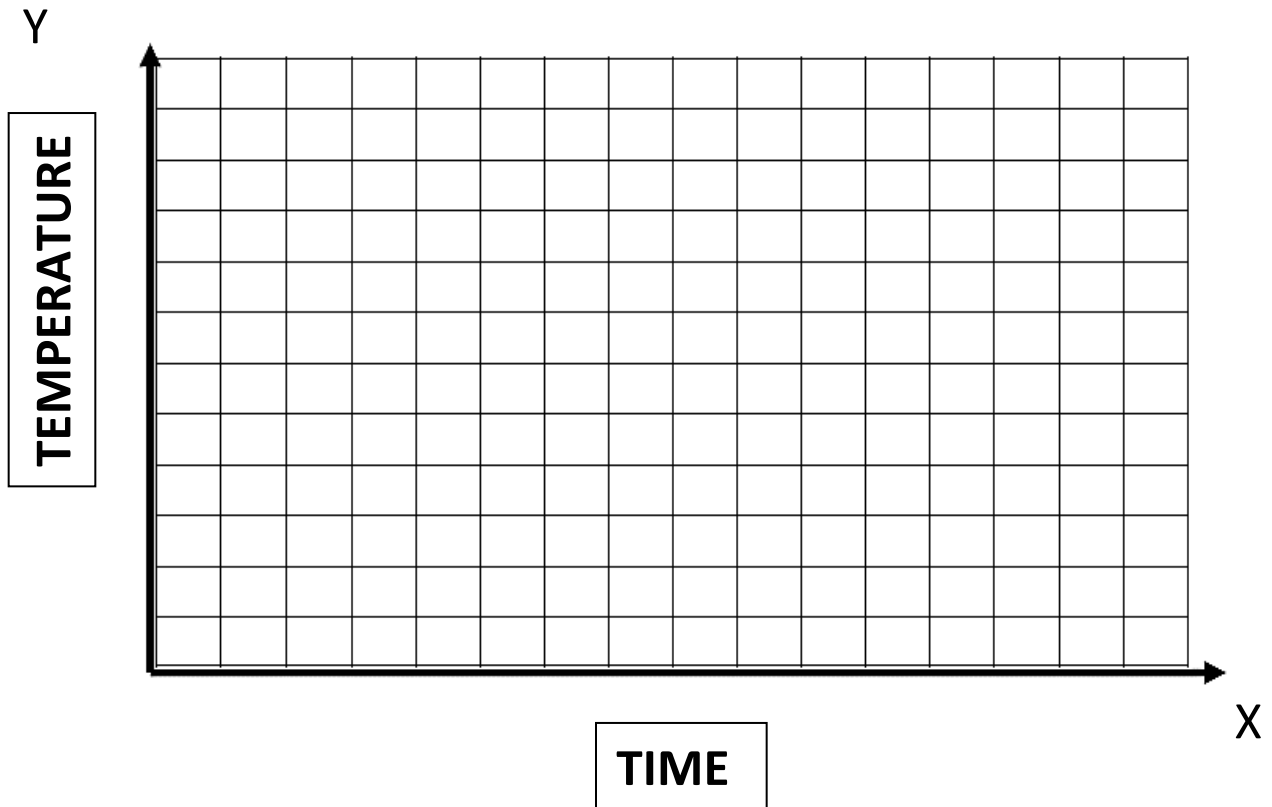
• Name the figure _____



34) The temperature in Michelle's house from 9:00 a.m. to 7:00 p.m. is recorded in the table below. Make a line graph to display the information. **Remember to give the graph a title.**

Time	9 am	11 am	1 pm	3 pm	5 pm	7 pm
Temperature	65°F	60°F	63°F	68°F	65°F	60°F

Title: _____



What is the **approximate** temperature in Michelle's house at 2:00 pm? _____

What is the **difference** in temperature from 1:00 p.m. to 3:00 pm? _____