

Unit 1 \_\_\_\_/5

Unit 5 \_\_\_\_/5

Unit 2 \_\_\_\_/2

Unit 6 \_\_\_\_/2

Unit 3 \_\_\_\_/6

Unit 7 \_\_\_\_/1

Unit 4 \_\_\_\_/1

Unit 8 \_\_\_\_/5

# MATH JOURNAL GRADE 8

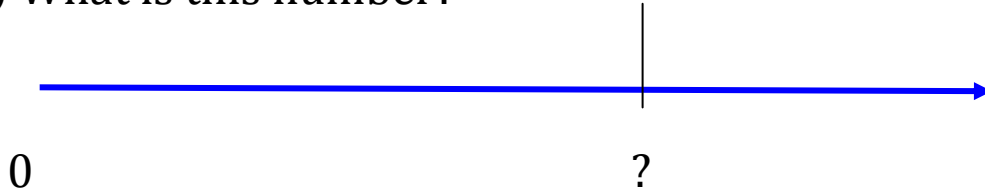
NAME: \_\_\_\_\_

CLASS: \_\_\_\_\_

TEACHER: Mrs. Bennett or Mr. Sheppard

## UNIT 1: SQUARES , SQUARE ROOTS AND PYTHAGOREAN THEOREM

1. A) What is this number?



Justify and explain your answer.

B) Choose a different kind of number for the above.

---

Justify and explain your new number.

2. Give as many KINDS of numbers telling what type of number they are.



## **UNIT 2: INTEGERS**

6. A friend missed the class for multiplying integers. Write in words HOW to calculate:

A)

B)

7. Merrill said:

If I divide  $(+12)$  by 4, 3, 2, 1 the quotient is less than  $+12$ .

If I divide  $(+12)$  by 4, 3, 2, 1 the quotient is less than  $-12$ .

Explain why you AGREE or DISAGREE.

**Unit 3 FRACTIONS**

8. If Sally had  $\frac{3}{4}$  of a bar. She gave  $\frac{1}{3}$  of it to Todd.  
MODEL this and show the answer.

9. Explain how you would use a diagram to show—      — .

10. Eugene calculated —      — and got — . Explain what he did WRONG.

11. Freddy multiplied  $—$   $-$  . His solution was  $-$ .

Why is this WRONG?

12. Alice wrote this solution on her test:

$$\begin{array}{r} - \\ - \\ - \\ - \end{array}$$

$$= -$$

Explain why this is WRONG?

13. To win a cell phone, Narris and Bob both answered the question:

– . Answers were as follows:

NARRIS: 4

BOB: 9

A)How could they possibly get their answer? SHOW them.

B)WHO is CORRECT? Why?

### **UNIT 4: MEASURING PRISMS AND CYLINDERS**

14. Use an example to show how the area of the CURVED SURFACE of a cylinder relates to area of a rectangle.

### **UNIT 5: Percents, ratios and Rates**

15. Kylor bragged he received a 105% on his math test. Is this mark possible. Give an example to support your answer.

16. On a test, Stan said –  $\% = 0.5$  . EXPLAIN why this was WRONG?



17. A jacket costs \$100. The discount was 15%. The sales tax was 15%. Would the cost be (less than /greater than) \$100? EXPLAIN your reasoning.

18. Cassandra works part-time. On her next cheque she gets 5% performance bonus and 10% increase in pay.

Cassandra told her friend she got a 15% raise in pay.  
Is she CORRECT? EXPLAIN your reasoning.

19. A) How are rates and ratios the SAME.

Use an example to help your explanation.

B)How are rates and ratios DIFFERENT.

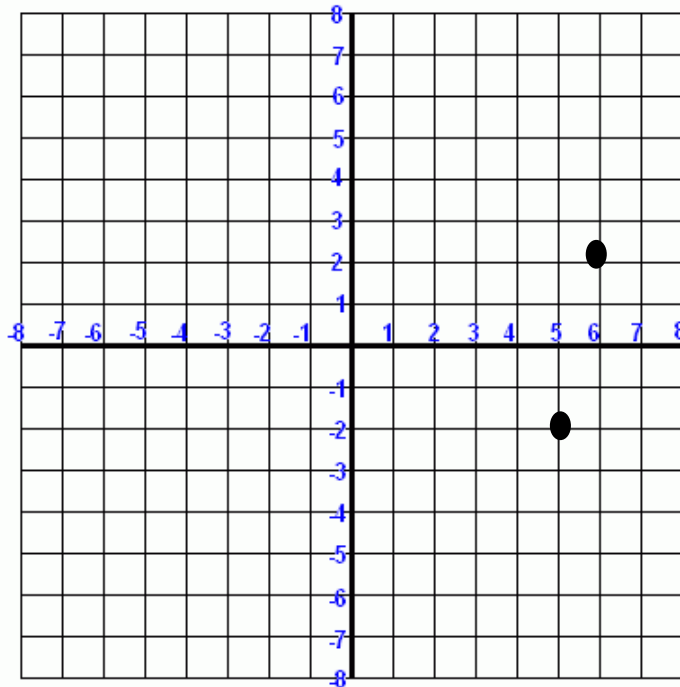
Use an example to help your explanation.

## UNIT 6: LINEAR EQUATIONS AND GRAPHING

20. Jasmine missed class when students were told how to plot points on the Cartesian Plane ( graph).

Explain **IN WORDS** how to correctly plot the points.

21. Maxine plotted the following points: A( -2, 5) and B( 2, 6). What did she do **WRONG**?



## **UNIT 7: PROBABILITY**

22. Explain what you know about different types of graphs and how they can be used.

## **UNIT 8 : GEOMETRY**

23. A classmate insists you need 6 views of an object to create a physical model. Is he CORRECT? Explain YOUR ANSWER.

24. Draw TWO different regular polygons which tessellate a plane.

25. Jacqueline is tiling her bedroom floor. Can she use an octagonal tile? EXPLAIN how you know?

26. Marlene missed the tessellation class. How would you explain to her WHY some tessellating patterns made using translations CAN also be made using reflections?

27.A) What topic this year did you find the easiest?

TOPIC:\_\_\_\_\_

WHY?\_\_\_\_\_

\_\_\_\_\_

B)What topic gave you the most difficulty?

TOPIC:\_\_\_\_\_

WHY?\_\_\_\_\_

\_\_\_\_\_

C)What does the following say IN WORDS:



\_\_\_\_\_