

# Mathematics 8

## Introduction Assignment

This assignment is intended to familiarize you with some of the basic concepts and skills related to *Math 8*. This is the first meaningful assignment for *Math 8*, so complete it with care.

Student Name \_\_\_\_\_

Student No. \_\_\_\_\_ Date \_\_\_\_\_

Address \_\_\_\_\_ Postal Code \_\_\_\_\_

\_\_\_\_\_

Complete the following *Math 8* Assignment independently and return it to your teacher based on the instructions provided by your school. No external resources are required to complete this assignment.

You will need a scientific calculator and a pencil to complete this assignment.

**There are three parts to this assignment:**

Part A: Math Riddle	15 marks
Part B: Art with Geometry	5 marks
Part C: Your Math Experiences	5 marks

**Assignment time:**

2 hours

Before you start, read these important tips.

- Read each question carefully before answering.
- Answer all questions to the best of your ability.
- Take your time. Check your work before handing in the test.
- Write neatly and watch your spelling.

### Decoder Table for Part 1: Math Riddle

<b>A</b>	-12
<b>E</b>	parallel
<b>F</b>	perpendicular
<b>G</b>	(2, -4)
<b>H</b>	2.1 cm <sup>2</sup>
<b>I</b>	-5
<b>L</b>	(-2, 4)
<b>N</b>	12
<b>O</b>	(0, 0)
<b>R</b>	1/2
<b>S</b>	2.8 cm <sup>2</sup>
<b>T</b>	2.5 or 2 1/2
<b>U</b>	25
<b>W</b>	4.8 cm
<b>Y</b>	9

## Part 1: Math Riddle

Answer the questions, then look up each answer in the Decoder Table. Put the letter that matches the answer in the blank beside the questions. (15 marks)

For example, 1. A circle with a radius of 2.4 cm has a diameter of 4.8 cm, which matches W in the Decoder Table. Put a W in the blank beside 1.

**Important:** For each question, show your work on a separate piece of paper and attach the paper to this assignment when you hand it in.

<b>W</b>	1. A circle with a radius of 2.4 cm has a diameter of this.
	2. $(-7) - 5$
	3. Area of a triangle with a height of 0.7 cm and a base of 6 cm
	4. The probability of getting a head when tossing a fair coin
	5. $10 - 22$
	6. On a graph, the point 2 units to the left and 4 units up.
	7. $\frac{3}{4} + 1\frac{3}{4}$
	8. Evaluate $y + 7$ when $y = 2$
	9. $0.5 + 1.2 + 0.8$
	10. $-4 - (7 + 1)$
	11. $3 \times 4$
	12. Area of a circle with a radius of 0.82 cm
	13. Evaluate $s + m$ when $s = -2$ and $m = -3$
	14. $-2 + (-4) + (-6)$
	15. $0.5 \times (3.28 + 1.72)$
	16. $5\frac{1}{3} - 2\frac{1}{3} - \frac{1}{2}$
	17. Area of a rectangle with a length of 4 cm and a width of 0.7 cm
	18. Line segments in the same plane which do not intersect
	19. On a graph, the point at the origin
	20. Lines that meet at a right angle

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	21. $2 \times 3 \times 2$
	22. $8 + (-3) + (-10)$
	23. $1/4$ is _____ percent
	24. $7/10 + 1 \frac{2}{5} + 2/5$
	25. 0.25 is _____ percent
	26. Line segments which intersect at $90^\circ$
	27. On a graph, the point 2 units to the right and 4 units down.
	28. The probability of getting a tail when tossing a fair coin
	29. $-13 + 8$
	30. $2 \times (-7 + 13)$

Now unscramble the letters to solve the riddle. The letter for question 1 has already been written in.

“How far can a dog run into the woods?”

					W			-											
3.	2.	6.	20.		1.	14.	8.			10.	26.	24.	18.	4.		15.	12.	5.	9.
																.			
13.	16.		22.	17.		28.	23.	11.	21.	29.	30.	27.		19.	25.	7.			

## Part 2: Art with Geometry

Draw a picture with the elements in the following list. Use a ruler or straightedge for the straight lines. If you have them, use a compass and a protractor. If you don't have them, draw around a circular object for the circle, and estimate the angles. Attach your work to this assignment when you hand it in. (5 marks)

- Parallelogram
- Circle
- Isosceles triangle
- A  $60^\circ$  angle
- A pair of perpendicular lines

Label the elements in your picture. You may colour it in if you like.

Check the following:

	Yes	No
I used a ruler or straightedge		
I used a protractor		
I used a compass		

### Part 3: Your Math Experiences

This part is for you to tell your teacher a bit about yourself and your math skills. Write a short paragraph of three to five sentences, and within the paragraph answer the following questions (5 marks):

- Are you taking this math course at home or at a school?
- What do you like about math?
- Are there certain topics that you find challenging or difficult?
- What do you expect to achieve from grade 8 math?

You can also add more information about yourself if you think it would help your teacher.

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