

## Summer Middle School Math Applications Assignment (6th Grade)

- Assignment 1 will review the concept of **Rounding Decimals**. Read the ***Rounding Decimals Intro*** and ***Rounding Cheat Sheet***. Pay close attention to the examples.
- After reviewing the ***Rounding Decimals Intro and Rounding Cheat Sheet***, complete #1-38 of the **Rounding Decimal Intro Handout**. Answers to #1-38 are to be written on the ***Rounding Decimal Intro Answer Sheet***. You may refer to the ***Rounding Cheat Sheet***.
- Assignment 2: Complete the front and back of the ***Rounding Maze***. (Please show work as demonstrated in the example on the back of the maze handout.
- Assignment 3: Complete the ***Round to the Nearest Hundredth Mystery Picture***. Connect answers in the order they were solved. Use a ruler to make a sharp picture and color the mystery picture neatly.

Bring the assignments to the first day of class, August 13th.

# Rounding Decimals Intro

When a number has more decimal places than you want or need, you can **round** it. Use the rules below to round a number to any place value.

**Rounding Decimals**

- Look at the digit to the right of the place being rounded.
- If the digit is 4 or less, the digit being rounded remains the same.
  - If the digit is 5 or greater, the digit being rounded is rounded up.

## EXAMPLES Round Decimals

**1** Round 3.92 to the nearest tenth.

tenths place



3.92 Look at the digit to the right of the tenths place.

Since 2 is less than 5, the digit in the tenths place stays the same.

3.92 rounded to the nearest tenth is 3.9.

**2** Round 46.297 to the nearest hundredth.

hundredths place



46.297 Look at the digit to the right of the hundredths place.

Since 7 is greater than 5, round 9 up.

46.297 rounded to the nearest hundredth is 46.30.

## Exercises

Round each number to the given place value.

- |                         |                      |                     |
|-------------------------|----------------------|---------------------|
| 1. 0.315; tenth         | 2. 0.2456; hundredth | 3. 17.499; tenth    |
| 4. 43.219; hundredth    | 5. 15.522; tenth     | 6. 9.6; ones        |
| 7. 7.0375; thousandth   | 8. 16.399; tenth     | 9. 6.95; tenth      |
| 10. 99.1283; thousandth | 11. 1,000.37; tenth  | 12. 750.523; ones   |
| 13. 0.445; hundredth    | 14. 490.299; ones    | 15. 999.99; tenth   |
| 16. 476.835; hundredth  | 17. 682.596; tenth   | 18. 1,000.562; ones |

Round each number to the underlined place-value position.

- |                     |                              |                      |
|---------------------|------------------------------|----------------------|
| 19. 0.7 <u>8</u> 9  | 20. 0. <u>9</u> 6            | 21. 1.5 <u>7</u> 246 |
| 22. 2 <u>3</u> .48  | 23. 1.7 <u>0</u> 4           | 24. 0. <u>1</u> 63   |
| 25. 15. <u>4</u> 51 | 26. 4.52 <u>9</u> 88         | 27. 0. <u>7</u> 87   |
| 28. <u>3</u> 8.56   | 29. <u>5</u> 9.61            | 30. <u>0</u> .555    |
| 31. 0. <u>5</u> 55  | 32. 0. <u>5</u> 55           | 33. 10. <u>9</u> 29  |
| 34. 10. <u>9</u> 29 | 35. <u>4</u> 2 <u>5</u> .599 | 36. 0.92 <u>9</u> 29 |

37. **HORSES** A trainer recorded a racehorse running at 47.54 miles per hour. Round this speed to the nearest mile per hour.
38. **POPULATION** In 2000, the population of Texas was 20.85 million. Round to the nearest million.

# Rounding Cheat Sheet

Decimal Places	
Whole Number	15
Tenths Place	1. <u>2</u>
Hundredths Place	2.3 <u>4</u>

Thousandths Place

2.344

Rounding	
Look to the number directly after the place you need to round to. Ex: Round the following numbers to the nearest <b>tenths place</b> .	
<p>&lt;5</p> <p>4.3<u>2</u></p> <p>Rounds down to...</p> <p>4.3</p>	<p>≥5</p> <p>6.3<u>5</u></p> <p>Rounds up to...</p> <p>6.4</p>

Name \_\_\_\_\_

Period \_\_\_\_\_

Rounding Decimals into Answer Sheet

2. \_\_\_\_\_

36. \_\_\_\_\_

4. \_\_\_\_\_

38. \_\_\_\_\_

6. \_\_\_\_\_

8. \_\_\_\_\_

10. \_\_\_\_\_

12. \_\_\_\_\_

14. \_\_\_\_\_

16. \_\_\_\_\_

18. \_\_\_\_\_

20. \_\_\_\_\_

22. \_\_\_\_\_

24. \_\_\_\_\_

26. \_\_\_\_\_

28. \_\_\_\_\_

30. \_\_\_\_\_

31. \_\_\_\_\_

32. \_\_\_\_\_

34. \_\_\_\_\_



# Maze Work Mat (Show Moving Decimal Work)

Directions: On the maze, begin in the box that shows START. Solve the problem on this sheet. Color in the box that the problem is in on the maze and color in the correct answer. The correct answer leads you to the next problem to solve. Continue solving and coloring in the correct answer until you reach END.

Ex. Round 3.92 to nearest tenth  
 $3.92 = 3.9$  nearest tenth

Name \_\_\_\_\_

START	①	②
③	④	⑤
⑥	⑦	⑧
⑨	⑩	END

# ROUND TO THE NEAREST HUNDRETH

- 0 • 0.01 • 0.02 • 0.03 • 0.04 • 0.05 • 0.06 • 0.07 • 0.08 • 0.09 • 0.10 • 0.11 • 0.12 • 0.13 • 0.14
- 0.15 • 0.16 • 0.17 • 0.18 • 0.19 • 0.20 • 0.21 • 0.22 • 0.23 • 0.24 • 0.25 • 0.26 • 0.27 • 0.28 • 0.29
- 0.30 • 0.31 • 0.32 • 0.33 • 0.34 • 0.35 • 0.36 • 0.37 • 0.38 • 0.39 • 0.40 • 0.41 • 0.42 • 0.43 • 0.44
- 0.45 • 0.46 • 0.47 • 0.48 • 0.49 • 0.50 • 0.51 • 0.52 • 0.53 • 0.54 • 0.55 • 0.56 • 0.57 • 0.58 • 0.59
- 0.60 • 0.61 • 0.62 • 0.63 • 0.64 • 0.65 • 0.66 • 0.67 • 0.68 • 0.69 • 0.70 • 0.71 • 0.72 • 0.73 • 0.74
- 0.75 • 0.76 • 0.77 • 0.78 • 0.79 • 0.80 • 0.81 • 0.82 • 0.83 • 0.84 • 0.85 • 0.86 • 0.87 • 0.88 • 0.89
- 0.90 • 0.91 • 0.92 • 0.93 • 0.94 • 0.95 • 0.96 • 0.97 • 0.98 • 0.99 • 1.00 • 1.01 • 1.02 • 1.03 • 1.04
- 1.05 • 1.06 • 1.07 • 1.08 • 1.09 • 1.10 • 1.11 • 1.12 • 1.13 • 1.14 • 1.15 • 1.16 • 1.17 • 1.18 • 1.19
- 1.20 • 1.21 • 1.22 • 1.23 • 1.24 • 1.25 • 1.26 • 1.27 • 1.28 • 1.29 • 1.30 • 1.31 • 1.32 • 1.33 • 1.34
- 1.35 • 1.36 • 1.37 • 1.38 • 1.39 • 1.40 • 1.41 • 1.42 • 1.43 • 1.44 • 1.45 • 1.46 • 1.47 • 1.48 • 1.49
- 1.50 • 1.51 • 1.52 • 1.53 • 1.54 • 1.55 • 1.56 • 1.57 • 1.58 • 1.59 • 1.60 • 1.61 • 1.62 • 1.63 • 1.64
- 1.65 • 1.66 • 1.67 • 1.68 • 1.69 • 1.70 • 1.71 • 1.72 • 1.73 • 1.74 • 1.75 • 1.76 • 1.77 • 1.78 • 1.79
- 1.80 • 1.81 • 1.82 • 1.83 • 1.84 • 1.85 • 1.86 • 1.87 • 1.88 • 1.89 • 1.90 • 1.91 • 1.92 • 1.93 • 1.94
- 1.95 • 1.96 • 1.97 • 1.98 • 1.99 • 2.00 • 2.01 • 2.02 • 2.03 • 2.04 • 2.05 • 2.06 • 2.07 • 2.08 • 2.09
- 2.10 • 2.11 • 2.12 • 2.13 • 2.14 • 2.15 • 2.16 • 2.17 • 2.18 • 2.19 • 2.20 • 2.21 • 2.22 • 2.23 • 2.24
- 2.25 • 2.26 • 2.27 • 2.28 • 2.29 • 2.30 • 2.31 • 2.32 • 2.33 • 2.34 • 2.35 • 2.36 • 2.37 • 2.38 • 2.39

Directions: Round each number to the Nearest Hundredth from Start to Stop. Find and connect your answers in the order they were solved, reading the answers vertically.

Start at 1.81	Stop at 1.67	Start at 1.76	1.336 =	0.641 =	0.854 =
1.662 =		1.769 =	1.199 =	0.627 =	0.859 =
1.516 =	Start at 1.84	1.922 =	Stop at 1.35	Stop at 1.06	Stop at 1.01
1.534 =	1.899 =	1.914 =			
1.687 =	1.746 =	Stop at 1.76	Start at 1.34	Start at 1.01	Start at 1.85
1.837 =	1.608 =		0.285 =	1.018 =	0.645 =
1.982 =	1.615 =	Start at 1.93	0.193 =	0.874 =	0.667 =
1.971 =	1.777 =	1.938 =	0.489 =	0.879 =	Stop at 1.87
Stop at 1.81	1.932 =	1.487 =	0.467 =	0.732 =	
	2.065 =	1.346 =	1.052 =	0.721 =	
Start at 1.67	2.064 =	1.798 =	Stop at 1.20	0.568 =	
1.678 =	Stop at 1.90	Stop at 1.81		0.562 =	
1.834 =			Start at 1.06	0.708 =	
1.819 =		Start at 1.49	1.086 =	0.702 =	