

Name: \_\_\_\_\_

Period: \_\_\_\_\_

### Rounding and Scientific Notation

#### **1. Rounding**

Round to the nearest ten:

- |       |         |        |        |       |         |
|-------|---------|--------|--------|-------|---------|
| 1) 89 | 2) 2673 | 3) 265 | 4) 514 | 5) 97 | 6) 2753 |
| _____ | _____   | _____  | _____  | _____ | _____   |

Round to the nearest hundred:

- |        |         |         |        |         |        |
|--------|---------|---------|--------|---------|--------|
| 1) 847 | 2) 2978 | 3) 5048 | 4) 333 | 5) 5496 | 6) 555 |
| _____  | _____   | _____   | _____  | _____   | _____  |

Round to the nearest thousand:

- |          |          |         |         |          |          |
|----------|----------|---------|---------|----------|----------|
| 1) 14389 | 2) 29610 | 3) 3492 | 4) 9520 | 5) 56239 | 6) 89743 |
| _____    | _____    | _____   | _____   | _____    | _____    |

Round to the nearest ten thousand:

- |          |          |           |          |           |          |
|----------|----------|-----------|----------|-----------|----------|
| 1) 24987 | 2) 37096 | 3) 145302 | 4) 24033 | 5) 295474 | 6) 77330 |
| _____    | _____    | _____     | _____    | _____     | _____    |

Round to the nearest hundred thousand:

- |           |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 1) 929689 | 2) 103232 | 3) 965123 | 4) 754300 | 5) 222678 | 6) 449987 |
| _____     | _____     | _____     | _____     | _____     | _____     |

Round to the nearest tenth:

- |           |          |          |         |          |          |
|-----------|----------|----------|---------|----------|----------|
| 1) 12.642 | 2) 29.10 | 3) 2.492 | 4) 3.44 | 5) 5.239 | 6) 89.43 |
| _____     | _____    | _____    | _____   | _____    | _____    |

Round to the nearest hundredth:

- |           |           |          |           |            |            |
|-----------|-----------|----------|-----------|------------|------------|
| 1) 23.987 | 2) 3.7096 | 3) 4.449 | 4) 44.043 | 5) 999.474 | 6) 7.44430 |
| _____     | _____     | _____    | _____     | _____      | _____      |

Round to the nearest thousandth:

- |          |          |           |           |          |           |
|----------|----------|-----------|-----------|----------|-----------|
| 1) .3265 | 2) .2673 | 3) .99989 | 4) 66.514 | 5) .2297 | 6) 3.2704 |
| _____    | _____    | _____     | _____     | _____    | _____     |

Round to the nearest tenth:

- |         |          |          |         |          |          |
|---------|----------|----------|---------|----------|----------|
| 1) 8947 | 2) 3.978 | 3) 9.048 | 4) 3.33 | 5) 54.96 | 6) 55.56 |
| _____   | _____    | _____    | _____   | _____    | _____    |

Round to the nearest hundredth:

- |           |           |           |            |            |            |
|-----------|-----------|-----------|------------|------------|------------|
| 1) 99.689 | 2) 13.232 | 3) 6.5123 | 4) 755.300 | 5) 222.678 | 6) 499.987 |
| _____     | _____     | _____     | _____      | _____      | _____      |

## 2. Convert into Scientific Notation

- 1) 703,770,000 \_\_\_\_\_
- 2) -66,545 \_\_\_\_\_
- 3) 50,369 \_\_\_\_\_
- 4) 1.5977 \_\_\_\_\_
- 5) -13,997,000 \_\_\_\_\_
- 6) 0.0000027226 \_\_\_\_\_
- 7) 352,240 \_\_\_\_\_
- 8) -0.000000071111 \_\_\_\_\_
- 9) 0.0047876 \_\_\_\_\_
- 10) 0.000000060207 \_\_\_\_\_
- 11) 0.000069502 \_\_\_\_\_
- 12) 959,790,000 \_\_\_\_\_
- 13) 724.64 \_\_\_\_\_
- 14) -761.3 \_\_\_\_\_
- 15) 1001 \_\_\_\_\_
- 16) 50 \_\_\_\_\_
- 17) 6,926,300,000 \_\_\_\_\_
- 18) -392 \_\_\_\_\_
- 19) 0.00361 \_\_\_\_\_
- 20) -0.13592 \_\_\_\_\_
- 21) -0.0038 \_\_\_\_\_
- 22) 0.00000013 \_\_\_\_\_
- 23) -0.567 \_\_\_\_\_
- 24) 100 \_\_\_\_\_
- 25) 100.0 \_\_\_\_\_

## 3. Converting into Real Numbers

- 1)  $2.1046 \times 10^{-8}$  \_\_\_\_\_
- 2)  $-7.5898 \times 10^{-7}$  \_\_\_\_\_
- 3)  $8.728 \times 10^0$  \_\_\_\_\_
- 4)  $4.1466 \times 10^{-2}$  \_\_\_\_\_
- 5)  $-4.3627 \times 10^6$  \_\_\_\_\_
- 6)  $6.3524 \times 10^{-4}$  \_\_\_\_\_
- 7)  $7.83 \times 10^{-7}$  \_\_\_\_\_
- 8)  $3.5246 \times 10^8$  \_\_\_\_\_
- 9)  $5.422 \times 10^{-2}$  \_\_\_\_\_
- 10)  $2.456 \times 10^{-4}$  \_\_\_\_\_
- 11)  $7.0472 \times 10^1$  \_\_\_\_\_
- 12)  $-8.1126 \times 10^1$  \_\_\_\_\_
- 13)  $5.3366 \times 10^4$  \_\_\_\_\_
- 14)  $-5.6224 \times 10^{-7}$  \_\_\_\_\_
- 15)  $9.139 \times 10^{-1}$  \_\_\_\_\_
- 16)  $4.2735 \times 10^0$  \_\_\_\_\_
- 17)  $1.92 \times 10^3$  \_\_\_\_\_
- 18)  $-3.051 \times 10^1$  \_\_\_\_\_
- 19)  $-4.29 \times 10^2$  \_\_\_\_\_
- 20)  $6.251 \times 10^9$  \_\_\_\_\_
- 21)  $8.317 \times 10^6$  \_\_\_\_\_
- 22)  $-1.03 \times 10^{-2}$  \_\_\_\_\_
- 23)  $8.862 \times 10^{-1}$  \_\_\_\_\_
- 24)  $9.512 \times 10^{-8}$  \_\_\_\_\_
- 25)  $-6.5 \times 10^{-3}$  \_\_\_\_\_

**4. Solve These Using Scientific Notation (only give up to 5 decimal places)**

1)  $4.2899 \times 10^{-3} - 7.3228 \times 10^{-4} =$

2)  $3.7249 \times 10^{-4} + 3.7549 \times 10^{-3} =$

3)  $3.7576 \times 10^{-3} + -4.3221 \times 10^{-2} =$

4)  $5.1867 \times 10^{-1} - 4.2625 \times 10^{-2} =$

5)  $-9.3747 \times 10^{-3} + 7.2271 \times 10^{-3} =$

6)  $-5.1706 \times 10^{-3} + 9.2314 \times 10^{-1} =$

7)  $-9.417 \times 10^{-3} - -4.7999 \times 10^{-4} =$

8)  $-8.5251 \times 10^4 + 3.909 \times 10^0 =$

9)  $7.3491 \times 10^3 - 1.2 \times 10^1 =$

10)  $5.6282 \times 10^4 + -6.2452 \times 10^3 =$

11)  $-1.3931 \times 10^2 + -1.2922 \times 10^2 =$

12)  $5.2042 \times 10^4 + 1.2107 \times 10^4 =$

13)  $9.3191 \times 10^3 - 7.6867 \times 10^1 =$

14)  $8.1733 \times 10^1 - 6.7644 \times 10^1 =$

15)  $-7.2644 \times 10^1 \times -2.8801 \times 10^0 =$

16)  $-5.8135 \times 10^4 \div 6.1508 \times 10^3 =$

17)  $8.6237 \times 10^2 \times -4.5188 \times 10^0 =$

18)  $-8.2296 \times 10^1 \times 9.2722 \times 10^3 =$

19)  $4.1563 \times 10^1 \div 2.3875 \times 10^5 =$

20)  $2.7198 \times 10^4 \div 4.7946 \times 10^1 =$

21)  $9.3191 \times 10^{-3} \times 7.6867 \times 10^1 =$

22)  $4.524 \times 10^{-5} \div -2.599 \times 10^{-3} =$

23)  $-9.5111 \times 10^{-2} \times 5.7312 \times 10^{-3} =$

24)  $7.1528 \times 10^{-5} \div 9.8888 \times 10^{-2} =$

25)  $-1.7322 \times 10^{-5} \div -7.4282 \times 10^{-2} =$

26)  $3.2337 \times 10^{-3} \div 6.7691 \times 10^{-2} =$

27)  $-7.4884 \times 10^{-7} \times -9.4472 \times 10^{-2} =$

28)  $7.2185 \times 10^{-4} \div 1.0617 \times 10^{-11} =$

29)  $7.7682 \times 10^{-1} \times 8.0306 \times 10^{-1} =$

30)  $6.3955 \times 10^{-5} \div 8.0041 \times 10^{-2} =$

31)  $4.1357 \times 10^{-15} \times 5.4 \times 10^2 =$

32)  $1.695 \times 10^4 \div 1.395 \times 10^{15} =$

33)  $4.367 \times 10^5 \times 1.96 \times 10^{11} =$

34)  $6.97 \times 10^3 \times 2.34 \times 10^{-6} - 3.2 \times 10^{-2} =$

35)  $5.16 \times 10^{-4} + 8.65 \times 10^{-8} \div 9.68 \times 10^4 =$

5. . Round your answers from question 4 to the given number of decimal places

1) (2) \_\_\_\_\_

19) (0) \_\_\_\_\_

2) (2) \_\_\_\_\_

20) (4) \_\_\_\_\_

3) (3) \_\_\_\_\_

21) (1) \_\_\_\_\_

4) (3) \_\_\_\_\_

22) (2) \_\_\_\_\_

5) (1) \_\_\_\_\_

23) (0) \_\_\_\_\_

6) (2) \_\_\_\_\_

24) (1) \_\_\_\_\_

7) (1) \_\_\_\_\_

25) (3) \_\_\_\_\_

8) (4) \_\_\_\_\_

26) (2) \_\_\_\_\_

9) (6) \_\_\_\_\_

27) (1) \_\_\_\_\_

10) (2) \_\_\_\_\_

28) (3) \_\_\_\_\_

11) (4) \_\_\_\_\_

29) (2) \_\_\_\_\_

12) (4) \_\_\_\_\_

30) (1) \_\_\_\_\_

13) (1) \_\_\_\_\_

31) (4) \_\_\_\_\_

14) (3) \_\_\_\_\_

32) (3) \_\_\_\_\_

15) (4) \_\_\_\_\_

33) (2) \_\_\_\_\_

16) (3) \_\_\_\_\_

34) (0) \_\_\_\_\_

17) (5) \_\_\_\_\_

35) (0) \_\_\_\_\_

18) (3) \_\_\_\_\_