

PROBLEMS AND SOLUTIONS - ROUNDING AND NUMBER COMPARISONS Prepared by Ingrid Stewart, Ph.D., College of Southern Nevada Please Send Questions and Comments to ingrid.stewart@csn.edu. Thank you!

YOU MUST BE ABLE TO DO THE FOLLOWING PROBLEMS WITHOUT A CALCULATOR!

Problem 1:

Round 6,296 to the nearest thousands place.

Problem 2:

Round **96.7945** to the nearest hundredths place!

Problem 3:

Round **5,371** to the nearest hundreds place.

Problem 4:

Round 1,795 to the nearest tens place.

Problem 5:

Round **58.6854** to the nearest tenths place!

Problem 6:

Round **21.1974** to the nearest hundredths place!

Problem 7:

Estimate the sum of 0.935 + 12.54 + 152.07 + 18 by rounding to tens. Then find the exact sum.

Problem 8:

Estimate the sum of 24,003 + 5,874 + 319,467 + 52,855 by rounding to thousands. Then find the exact sum.

Problem 9:

Estimate the difference of **427.45 - 125** by rounding to hundreds. Then find the exact difference.

Problem 10:

Estimate the difference of **4,048 - 36** by rounding to tens. Then find the exact difference.

Problem 11:

Estimate the cost of 38 light bulbs if each bulb costs \$1.15 by rounding to one nonzero digit. Then find the exact price.

Problem 12:

Estimate the cost of 54 knobs for your new kitchen cabinets if each know costs \$3.40 by rounding to one nonzero digit. Then find the exact price.

Problem 13:

The owner of a sandwich shop tells you that he will charge you \$108 for 18 sandwiches that you want to buy for your party. Estimate the cost of one sandwich by rounding to one nonzero digit. Then find the exact price.

0.601

Problem 14:

Which of the following numbers is the smallest?

0.016 0.106 0.16

Problem 15:

Which of the following numbers is the largest?

0.097 0.3 0.103 0.023

Problem 16:

Which of the following numbers is the smallest?

0.097 0.3 0.103 0.023

Problem 17:

On four tests, a student had the grades of 78, 89, 45, and 80. What is her *average or mean* grade?

Problem 18:

Find the *median* of the following numbers: 8.7, 2.7, 3, 9.85, and 4.5.

Problem 19:

Find the *median* of the following numbers: 9, 4, 13, 2, 11, 7, 16, 6, 4, 11.

Problem 20:

Which of the following fractions is the smallest?

$$\frac{3}{4}, \frac{5}{12}, \frac{2}{3}$$

Problem 21:

Which of the following fractions is the smallest?

$$\frac{87}{100}, \frac{27}{32}, \frac{4}{5}$$

SOLUTIONS

You can find detailed solutions below the link for this problem set!

1. 6000	2. 96.79	3. 5400
4. 1800	5. 58.7	6. 21.20
7. 180, 183.545	8. 402000, 402199	9. 300, 302.45
10. 4010, 4012	11. \$40, \$43.70	12. \$150, \$183.60
13. \$5, \$6	14. 0.016	15. 0.3
16. 0.023	17. 73	18. 4.5
19. 8	20. 5/12	21. 4/5