

Problem set - Decimals

Name: _____ Date: _____

Solve each problem. Show all of your work.

For problems 1 through 4, round each decimal as indicated.

1. 12.435; hundredth

3. 989.95; tenth

2. 0.0083; thousandth

4. 2123.4; hundred

For problems 5 through 10, write each item as a decimal rounded to the nearest ten thousandth.

5. $\frac{5}{16}$

8. $5\frac{5}{12}$

6. $14\frac{2}{3}$

9. $\frac{52}{14}$

7. $\frac{7}{8}$

10. $\frac{5}{9}$

11. What is the sum of 48.55 and 12.78?

12. Subtract 78.7 from 210.12.

13. Multiply 1.81 by 0.042.

14. Write as a decimal the length forty-nine ten-thousandths of an inch.

15. Round to the nearest tenth the product of 12.2 and 19.8.
16. Round to the nearest tenth the ratio of 2.96 feet to 1.25 feet.
17. Find to the nearest hundredth 386.19 divided by 12.
18. If it takes 2.2 cubic feet of acetylene to make one bracket, how many cubic feet are needed to make thirty brackets?
19. If a milling machine removes three thousandths of an inch per pass, how many passes are required to remove 0.024 inches?
20. A rod with a diameter of $\frac{7}{16}$ inches is turned on a lathe to a diameter of 0.375 inches. To the nearest thousandth of an inch, by how much is the diameter of the rod reduced?
21. If 3.2 gallons of catalyst are required for every hundred gallons of solvent, how many gallons of catalyst are required for 250 gallons of solvent?
22. Which is cheaper per foot, a 48-foot piece of wire rope for \$17.89, or a 108-foot piece for \$37.79?