Problem set - decimals - 3

Name: _____ Date: _____

Solve each problem. Show all of your work.
For 1 through 4, write each item as a decimal number.

1. $800 + 90 + 5$

2. $10 + 2 + \frac{3}{10} + \frac{4}{100}$

3. $\frac{5}{10} + \frac{8}{100} + \frac{8}{1000}$

4. two hundred fifty-one & 48/100

For 5 through 8, write each item in expanded form.

5. 34

6. 5.73

7. 305.032

8. 110.01

11. Write each item as a fraction in lowest terms

    (a) 0.6

    (b) 0.52

    (c) 0.05

    (d) 0.0012

12. Multiply 12.8 by 15.25. Round the result to the nearest tenth.

13. Write as a decimal the length three hundred forty-two ten thousandths of an inch.

14. Round to the nearest tenth the sum of 14.53, $-9.6$, and 32.11.

15. Round to the nearest tenth the ratio of 8.22 feet to 4.5 feet.

16. Find to the nearest hundredth 73.163 divided by 1.61.

17. Divide 428.46 by 24.51. Round the quotient to the nearest hundredth.

18. A forty-pound bag of material costs \$21.99. How much does it cost per pound, to the nearest cent?

19. If a commodity costs \$3.19 per ton, how much is 48.4 tons, to the nearest cent?

20. A journey of a thousand miles required \$77.50 for gas. With gas at 2.89 per gallon, how many miles per gallon did Pat's van get, to the nearest tenth?

21. A piping system drains 3 gallons per hour. To the nearest hour, how long does it take to move $10,000$ gallons?

22. Stock $\frac{7}{8}$ inch in diameter is to be reduced to 0.862 inches in diameter. To the nearest thousandth of an inch, how much material must be removed?

23. A tool removes three hundredths of an inch in twenty-two seconds. How long does it take to the nearest second to remove two tenths of an inch?