

Problem set - word problems

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

Solve each problem. Show all of your work.

1. Twelve pounds of material costs forty-eight dollars. How much is material per pound?
  
  
  
  
  
  
  
  
  
  
2. Material costs three dollars per pound. How much is twenty pounds?
  
  
  
  
  
  
  
  
  
  
3. If material costs \$5/lb., how much can you get for \$30?
  
  
  
  
  
  
  
  
  
  
4. It costs \$500 per hour to run the cell. How long can we run the cell for \$72,000?
  
  
  
  
  
  
  
  
  
  
5. It costs \$730 per hour to run the cell. How much will it cost to run the cell for sixty hours?
  
  
  
  
  
  
  
  
  
  
6. Running the cell for eight hours cost \$1,760. How much did it cost per hour?
  
  
  
  
  
  
  
  
  
  
7. Alice drove 350.8 miles on 19.6 gallons of gas. How many miles per gallon did Alice get, to the nearest unit?

8. If Zoe's car gets thirty-eight miles per gallon, how far can Zoe drive on sixteen gallons?
9. If the red car gets thirty-two miles per gallon, how many gallons does it need to go eight hundred miles?
10. The grinder removes 0.006 inches per pass. How many passes does it take to remove  $\frac{1}{32}$ ? Round up to the next whole number.
11. The grinder removes a total of  $\frac{5}{32}$  of an inch in 8 passes. To the nearest thousandth of an inch, how much does it remove per pass?
12. To the nearest thousandth of an inch, how much material must be removed per pass in order to remove 0.05 inches in eight passes?
13. The budget allows \$1,500 for fluid.
- (a) A case of a dozen one-gallon cans costs \$275. How many cases can you get within budget, and how many gallons is that?
  - (b) A fifty-five-gallon drum costs \$700, plus \$80 for the necessary hand pump. How much is one hand pump and as many drums as you can get within budget, and how many gallons of fluid do you get?