

Name _____

Home Repairs and Improvements

1. To save on heating costs, you are putting insulation in the attic covering the entire ceiling. The attic is 30 feet by 42 feet. If the insulation costs \$0.90 per square foot, what is the total cost?

2. You are hiring a contractor to put a 24 ft x 30 ft addition on your house. You get multiple estimates for the job.
 - a. Contractor Chuck estimates the addition will be \$50 per square foot. Contractor Dave estimates the addition will cost a total of \$40,000. Which contractor gave the lower estimate?

 - b. The contractor needs to buy 30 2 in. by 4 in. boards that are 8-ft-long and 64 10-ft-long boards. The 8-ft boards cost \$3.12 and the 10-ft boards cost \$4.23. Find the total cost for all of the boards.

 - c. The ceiling will be 8-ft high. There will be four 3 ft by 5 ft windows. One gallon of paint covers about 400 square feet. It will take two coats of paint to cover the walls.
 - i. Calculate the area to be painted (you will not paint the windows).

 - ii. Calculate the area for 2 coats of paint.

 - iii. How many gallons of paint will be needed?

 - iv. If it costs \$32.81 per gallon of paint, how much will it cost?

3. You hire a landscaper to improve the curb appeal of your house. The landscaper charges \$40 per hour plus the cost of materials. You are adding six bushes that cost \$32 each and 5 flowers that cost \$12 each. It takes the landscaper 3 hours to do the job. What is the total cost?

4. You are building a fence around a rectangular garden that is 16 yd long and 12 yd wide. The posts will be placed 2 yards apart. How many posts do you need?

5. You want to plant a row of trees that will grow up to make a barrier between you and your neighbor. The length of the row is 148 feet. If you want to plant a tree every $18\frac{1}{2}$ feet, how many trees will you plant?

6. Your pipe bursts and you need a plumber right away. The plumber's hourly rate is usually \$50 per hour, but it is the weekend, so you will have to pay time and a half. You also have to pay for parts, which are \$85. It takes the plumber 2 hours to fix the pipe. What is your total cost for the repair?

7. You have well water and the old well is not safe to drink from anymore, so you need to have a new well drilled. It is going to cost \$25 per foot of depth. The new well has to be 145 feet deep. How much will it cost to drill the new well?

8. You need a 220-volt outlet installed. You hire an electrician who charges \$75 per hour plus parts. The cost of the outlet, wiring, and box needed is \$60. It takes the electrician 30 minutes to install. How much will you be charged to install the outlet?

9. You are paving your driveway. It is going to cost \$3.50 per square foot. Your driveway is 50 feet long and 10 feet wide. How much will it cost to pave your driveway?

10. Your furnace breaks so you call a local heating company. They tell you that the initial assessment is free if you hire them to do the work, otherwise they will charge you \$60 for a service call. They assess the problem and determine that you are going to need a new furnace. If you hire them, they will charge \$5,000 for the furnace plus \$2,385 in labor costs. You decide to hire them. What is your total bill?

11. Contractors should have insurance. Why is it important that they have the proper insurance before working on your house?

12. _____ True/False. When building a new house, you (or the contractor) need to obtain permits.