

ACTIVITY 6

FIX-UP PROJECT

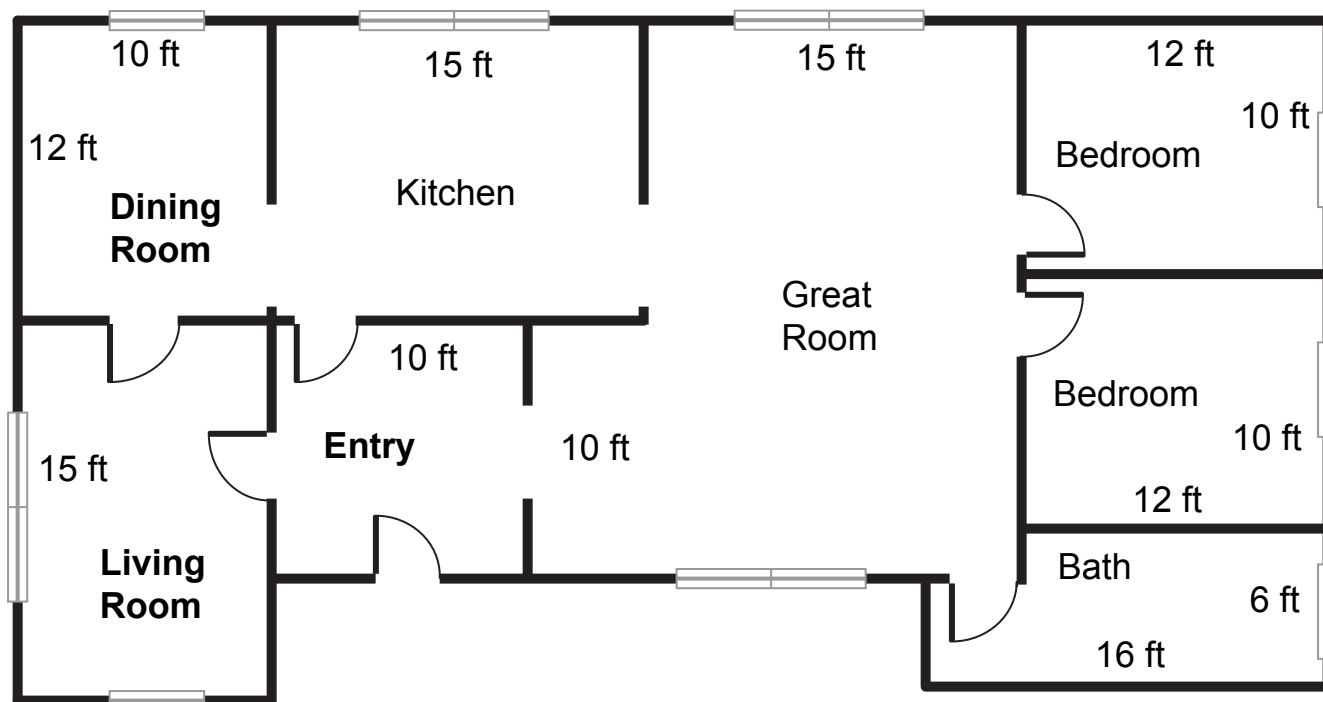
There is a lot of mathematics involved in building or even renovating a home. The vast majority of the numbers have to do with measurements (length and area, for example) and cost (per square foot, per gallon, per linear foot, etc.). This activity will give you real-world experience applying the learning you've done in Chapter 3.

The scenario: You own a home and have decided to remove the horrible old linoleum that has been the floor covering throughout the entry, living room and dining room since the early 80s. You have decided to install new floor coverings and baseboards in each of these three rooms. In the entry, you want tile on the floor and plastic baseboard. The dining room will have wood flooring with wood baseboard. For the living room, you have decided on carpet with wood baseboard.

The problem now is that you need to know how much flooring and baseboard each room requires and how much all this renovation will cost.

Use the general information and floor plan below in order to help you fill out the chart on the following page.

General Information			
Flooring Costs		Baseboard Costs	
Tile	\$ 3.00 per square foot	Wood	\$ 1.25 per foot
Wood	\$ 8.00 per square foot	Plastic	\$ 0.75 per foot
Carpeting	\$ 2.44 per square foot	<i>Allow 2.5 feet for all doors and 4 feet for all doorways without doors</i>	



Fill in the missing information in the table below. Round totals to the nearest cent.

	Dining Room	Living Room	Entry
Dimensions of the Room	10 ft × 12 ft	15 × 10	10 × 10
Perimeter of the Room	44 ft	50 ft	40 ft
Area of the Room	120 ft²	150 ft²	100 square ft
Flooring Type Desired	Wood	Carpet	Tile
Base Cost of Flooring	\$8 / ft²	\$2.44 / ft²	\$3.00 per square ft
Amount Needed	120 square ft	150 / ft²	100 / ft²
Total Cost for Flooring	\$960.00	\$366.00	\$300.00
Baseboard Type Desired	Wood	Wood	Plastic
Base Cost for Baseboard	1.25 / ft	1.25 / ft	.75 / ft
Amount Needed (perimeter minus doorways)	37.5 ft	45 ft	
Total Cost of Baseboard	\$46.88	\$56.25	\$21.38
Total Cost for BOTH Flooring and Baseboard (for each room)	\$1006.88	\$422.25	\$321.38
Total Cost for Flooring and Baseboard (all 3 rooms) w/o Sales Tax	\$1750.51		
Amount Charged for Sales Tax (7%)	\$122.54		
Total Cost (including sales tax)	\$1873.05		