

## MM150 Unit 8

### Initial Response Post:

Once the floor plan is chosen, each group member (including the student who posted the floor plan) will pick one of the following costs and post the results. In your post include all area/perimeter and cost calculations. Round all dimensions in the floor plans to the nearest foot. For the subject of your post, type the cost you have chosen so that your fellow group members know which ones have already been completed.

### Initial Response Post Example

NOTE: Not all parts of the Discussion are included in this Example. Read the Discussion Question thoroughly and respond to all parts of the Question.

#### Bedroom Flooring:

I found bamboo flooring priced at \$2.17 / square foot <URL here>

Master Bedroom:  $16'0'' \times 12'9'' = 16' \times 13' = 208 \text{ ft}^2$

Bedroom #2:  $11'0'' \times 10'10'' = 11' \times 11' = 121 \text{ ft}^2$

Bedroom #3:  $11'0'' \times 10'10'' = 11' \times 11' = 121 \text{ ft}^2$

Total Bedroom Area:  $208 + 121 + 121 = 450 \text{ ft}^2$

Total Flooring Cost:  $450 * 2.17 = \$976.50$

#### Main Living Area Flooring:

I found bamboo flooring priced at \$2.17 / square foot <URL here>

Kitchen:  $12'2'' \times 11'9'' = 12' \times 12' = 144 \text{ ft}^2$

Dining:  $12'3'' \times 11'6'' = 12' \times 12' = 144 \text{ ft}^2$

Living:  $12'2'' \times 12'3'' = 12' \times 12' = 144 \text{ ft}^2$

Total Main Living Area:  $144 + 144 + 144 = 432 \text{ ft}^2$

Total Flooring Cost:  $432 * 2.17 = \$937.44$

#### Bedroom Walls:

I found a gallon of paint priced at \$29.98/gallon <URL here> and one gallon covers 400 ft<sup>2</sup>.

Master Bedroom:  $16'0'' \times 12'9'' = 16' \times 13'$

16' width \* 8' height \* 2 walls = 256 ft<sup>2</sup>  
13' width \* 8' height \* 2 walls = 208 ft<sup>2</sup>  
256 + 208 = 464 ft<sup>2</sup> for all 4 walls

Bedroom #2: 11'0" x 10'10" = 11' x 11'  
11' width \* 8' height \* 4 walls = 352 ft<sup>2</sup>

Bedroom #3: 11'0" x 10'10" = 11' x 11'  
11' width \* 8' height \* 4 walls = 352 ft<sup>2</sup>

Total Bedroom wall area: 464 + 352 + 352 = 1168 ft<sup>2</sup>

Total Bedroom paint cost: 1168/400 = 2.92 gallons of paint. 3 gallons \* \$29.98 = \$89.94

### **Main Living Area Walls:**

I found a gallon of paint priced at \$29.98/gallon <URL here> and one gallon covers 400 ft<sup>2</sup>.

Kitchen: 12'2" x 11'9" = 12' x 12'  
12' width \* 8' height \* 4 walls = 384 ft<sup>2</sup>

Dining: 12'3" x 11'6" = 12' x 12'  
12' width \* 8' height \* 4 walls = 384 ft<sup>2</sup>

Living: 12'2" x 12'3" = 12'2" x 12'3"  
12' width \* 8' height \* 4 walls = 384 ft<sup>2</sup>

Total Main Living wall area: 384 + 384 + 384 = 1152 ft<sup>2</sup>

Total Bedroom paint cost: 1152/400 = 2.88 gallons of paint. 3 gallons \* \$29.98 = \$89.94

### **Bedroom Crown Molding:**

I found crown molding at \$11.55 for an 8 ft long piece <URL here>.

Master Bedroom: 16'0" x 12'9" = 16' x 13'  
Perimeter: 16' + 16' + 13' + 13' = 58 ft

Bedroom #2: 11'0" x 10'10" = 11' x 11'  
Perimeter: 11' + 11' + 11' + 11' = 44 ft

Bedroom #3: 11'0" x 10'10" = 11' x 11'  
Perimeter: 11' + 11' + 11' + 11' = 44 ft

Total Bedroom wall perimeter: 58 + 44 + 44 = 146 ft

Total Bedroom molding cost:  $146 \text{ ft} / 8 \text{ ft piece} = 18.25 \text{ pieces}$ .  $19 \text{ pieces} * \$11.55 = \$219.45$

### **Main Living Crown Molding:**

I found crown molding at \$11.55 for an 8 ft long piece <URL here>.

Kitchen:  $12'2'' \times 11'9'' = 12' \times 12'$

$12' + 12' + 12' + 12' = 48 \text{ ft}$

Dining:  $12'3'' \times 11'6'' = 12' \times 12'$

$12' + 12' + 12' + 12' = 48 \text{ ft}$

Living:  $12'2'' \times 12'3'' = 12' \times 12'$

$12' + 12' + 12' + 12' = 48 \text{ ft}$

Total Main Living wall perimeter:  $48 + 48 + 48 = 144 \text{ ft}$

Total Main Living molding cost:  $144 \text{ ft} / 8 \text{ ft piece} = 18 \text{ pieces}$ .  $18 \text{ pieces} * \$11.55 = \$207.90$

### **Exterior Gutters:**

I found gutters at \$49.97 for a 10 ft long piece <URL here>.

Length of house:  $12'2'' + 11'6'' + 11'9'' + 12'9'' = 12' + 12' + 12' + 13' = 49 \text{ ft}$

Width of house:  $12'3'' + 11' = 12' + 11' = 23 \text{ ft}$

Length + 2ft overhang in both directions:  $49 + 2 + 2 = 53 \text{ ft}$

Width + 2 ft overhang in both directions  $22 + 2 + 2 = 26 \text{ ft}$

Outside roofline perimeter:  $53 + 53 + 26 + 26 = 158 \text{ ft}$

Gutter cost:  $158 \text{ ft} / 10 \text{ ft piece} = 15.8 \text{ pieces}$ .

$16 \text{ pieces} * \$49.97 = \$799.52$

### **Roofing Materials:**

I found architectural shingles at \$28.00 per bundle. Each bundle covers  $33.33 \text{ ft}^2$  <URL here>.

Length of house:  $12'2'' + 11'6'' + 11'9'' + 12'9'' = 12' + 12' + 12' + 13' = 49 \text{ ft}$

Width of house:  $12'3'' + 11' = 12' + 11' = 23 \text{ ft}$

Length + 2ft overhang in both directions:  $49 + 2 + 2 = 53 \text{ ft}$

Width + 2 ft overhang in both directions  $22 + 2 + 2 = 26 \text{ ft}$

Area of roof:  $53 * 26 = 1378 \text{ ft}^2 * 1.054 \text{ multiplier} = 1452.412 \text{ ft}^2$

Roofing cost:  $1452.412 \text{ ft}^2 / 33.33 \text{ ft}^2 \approx 43.6$  bundles; 44 bundles \* \$28 = \$12