

Real World Applications for Perimeter & Area Problems (B)

1. A rectangular room has dimensions of 13ft by 15ft. Determine P & A of room!
If carpet and installation cost per \$3 sq ft then cost to carpet room?
Hint: 1 ft x 1 ft = 1 sq ft $P = L+W+L+W$ $A = L \times W$
 $P = 15+13+15+13 = 56\text{ft}$ $A = 15 \times 13 = 195\text{sqft}$
Cost to Carpet floor $195\text{sqft} \times \$3 = \585
2. A rectangular room has dimensions of 12ft by 14ft. Determine P & A of room!
If baseboard & installation is \$4 per Linear Ft then cost to install baseboard!
Hint: 1 Linear Foot is 1 ft $P = L+W+L+W$ $A = L \times W$
 $P = 14+12+14+12 = 52\text{ft}$ $A = 14 \times 12 = 168\text{sqft}$
Baseboard around Perimeter of Floor Installed $52\text{ft} \times \$4 = \208
3. A room has dimensions 15 1/2ft by 12 1/4ft then P & A of room in Decimals?
If hardwood for floor and installation cost per \$6 sq ft then cost for hardwood?
Hint: 12" = 1 ft $P = L+W+L+W$ $A = L \times W$
 $P=15.5+12.25+15.5+12.25=55.5\text{ft}$ $A=15.5 \times 12.25=189.875\text{sqft}$
Hardwood Floor installed $189.875\text{sqft} \times \$6 = \$1139.25$
4. A room has dimensions 14.25ft by 12.5ft then find P & A with Mixed Numbers!
If crown molding & installation is \$5 per Linear Ft then cost for crown molding!
Hint: 1 Linear Foot is 1 ft $P = L+W+L+W$ $A = L \times W$
 $P = 14 \frac{1}{4}+12 \frac{1}{2}+14 \frac{1}{4}+12 \frac{1}{2} = 53.5\text{ft}$ $A = 14 \frac{1}{4} \times 12 \frac{1}{2} = 178 \frac{1}{8}\text{sqft}$
Crown Molding around Ceiling Perimeter Installed $53.5\text{ft} \times \$5 = \267.50
5. A rectangular room has dimensions of 14ft by 18ft. Determine P & A of room!
If linoleum and installation cost per \$1.75 sq ft then cost for linoleum installed?
Hint: 1 ft x 1 ft = 1 sq ft $P = L+W+L+W$ $A = L \times W$
 $P = 18+14+18+14 = 64\text{ft}$ $A = 18 \times 14 = 252\text{sqft}$
Cost for Linoleum floor $252\text{ft} \times \$1.75 = \441.00
6. A rectangular room has dimensions of 12ft by 17ft. Determine P & A of room!
If baseboard & installation is \$4 per Linear Ft then cost to install baseboard!
Hint: 1 Linear Foot is 1 ft $P = L+W+L+W$ $A = L \times W$
 $P = 17+12+17+12 = 58\text{ft}$ $A = 17 \times 12 = 204\text{sqft}$
Baseboard around Perimeter of Floor Installed $58\text{ft} \times \$4 = \232
7. A room has dimensions 13 1/2ft by 16 1/4ft find P & A of room in Decimals!
If hardwood for floor and installation cost per \$8 sq ft then cost for hardwood?
Hint: 12" = 1 ft $P = L+W+L+W$ $A = L \times W$
 $P = 13.5+16.25+13.5+16.25 = 59.5\text{ft}$ $A=16.25 \times 13.5 = 219.375 \text{ sqft}$
Hardwood Floor installed $219.375 \times \$8 = \1755.00
8. A room has dimensions 12' 4" by 16' 6" then find P & A with Mixed Numbers!
If crown molding & installation is \$5 per Linear Ft then cost for crown molding!
Hint: 1 Linear Foot is 1 ft $P = L+W+L+W$ $A = L \times W$
 $P = 12 \frac{1}{3} + 16 \frac{1}{2} + 12 \frac{1}{3} + 16 \frac{1}{2} = 57 \frac{2}{3}\text{ft}$ $A = 16 \frac{1}{2} \times 12 \frac{1}{3} = 203 \frac{1}{2}\text{sqft}$
Crown Molding around Perimeter of Ceiling Installed $57 \frac{2}{3}\text{ft} \times \$5 = \$288.35$