

Lesson 15

- 1) rectangular walls:
 $2(25 \times 12) + 2(18 \times 12) =$
 $2(300) + 2(216) =$
 $600 + 432 = 1,032 \text{ sq. ft.}$
triangular sections:
 $2(1/2)(12 \times 18) = 216 \text{ sq. ft.}$
total:
 $1,032 + 216 = 1,248 \text{ sq. ft.}$
- 2) $1,248 \div 425 = 2.94 \text{ gal. (rounded)}$
 $2.94 \times 2 \text{ coats} = 5.88 \text{ gal.}$, so 6 gal will
need to be purchased
 $6 \times 28 = \$168$
- 3) if 2 5-gallon buckets were purchased:
 $2 \times 120 = \$240.00$
In a real-life situation you probably
would have purchased one 5-gallon
bucket, and a 1-gallon bucket.
 $120 + 28 = \$148$
 $168 - 148 = \$20 \text{ savings}$
- 4) $1,248 \div 250 = 5 \text{ gal. (rounded)}$
 $5 \times 2 \text{ coats} = 10 \text{ gal.}$
 $10 \times 20 = \$200$
The more expensive paint is a better
buy, because you don't have to buy
as much of it.

- 5) $4(18) + 4(25) =$
 $72 + 100 =$
 172 sq. ft.
 $1248 - 172 = 1076 \text{ sq. ft.}$
- 6) $1076 \times 1.12 = 1205.12$
13 squares
- 7) whole rectangle:
 $12 \times 18 = 216 \text{ sq. ft.}$
closet:
 $6 \times 3 = 18 \text{ sq. ft.}$
cutout:
 $4 \times 8 = 32 \text{ sq. ft.}$
 $216 - 18 - 32 = 166 \text{ sq. ft.}$
- 8) 9 sq. ft. in a sq. yd.
 $166 \div 9 = 18.44 \text{ sq. yd. (rounded)}$
- 9) $18.44 \times 1.10 = 20.28 \text{ (rounded)}$
21 sq. yds. needed
 $12 \times 21 = \$252$
- 10) $166 + 18 = 184 \text{ sq. ft.}$
 $184 \div 9 = 20.45 \text{ sq. yds.}$
 $20.45 \times 1.10 = 22.495 \text{ sq. yds.}$
23 sq. yds. will be needed
 $23 \times 12 = \$276$

Lesson 16

- 1) each face is a triangle
 $A = 1/2(bh)$
 $A = 1/2(4)(3.5)$
 $A = 7 \text{ sq. in. per face}$
 $7 \cdot 8 = 56 \text{ sq. in.}$
- 2) each face is a square
 $5 \times 5 = 25 \text{ sq. in. per face}$
 $25 \times 6 = 150 \text{ sq. in.}$
- 3) each face is a triangle
 $A = 1/2(bh)$
 $A = 1/2(10)(8.7)$
 $A = 43.5 \text{ sq. in. per face}$
 $43.5 \times 20 = 870 \text{ sq. in.}$
- 4) $4 + 4 = 6 + 2$
 $8 = 8$
- 5) $8 + 6 = 12 + 2$
 $14 = 14$
- 6) $12 + 20 = 30 + 2$
 $32 = 32$
- 7) $20 + 12 = 30 + 2$
 $32 = 32$