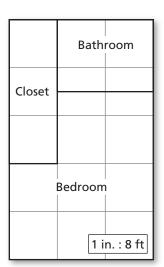
12.5 Practice B

1. In the actual blueprint of the bedroom suite, each square has a side length of $\frac{1}{2}$ inch.



- **b.** What are the dimensions of the bathroom?
- **c.** What is the length of the longest wall in the bedroom?
- **d.** What is the ratio of the perimeter of the closet to the perimeter of the bathroom?
- **e.** What is the ratio of the area of the closet to the area of the bathroom? How can you explain this by looking at the squares in each?



- **f.** All of the walls in the bedroom suite are covered with drywall. Which will cost the most to drywall—the closet, the bathroom, or both are the same?
- **g.** All of the floors in the bedroom suite are covered with tile. Which will cost the most to tile—the closet, the bathroom, or both are the same?
- **h.** What is the area of the bedroom?

Find the missing dimension. Use the scale factor 2 : 5.

2. Model: 10 km

3. Model: 5 in.

Actual: _ ?_

Actual: _?_

4. Model: ?

5. Model: _ ?_

Actual: 24 ft

- Actual: 32.5 m
- **6.** A scale factor is 1 : 8. Describe and correct the error in finding the model length that corresponds to 48 feet.

$$\frac{1}{8} = \frac{48 \text{ ft}}{x \text{ ft}}$$

$$x = 384 \text{ ft}$$