## Lesson 1 Practice Problems

1. Which one of these shapes is not like the others? Explain what makes it different by representing each width and height pair with a ratio.

2. In one version of a trail mix, there are 3 cups of peanuts mixed with 2 cups of raisins. In another version of trail mix, there are 4.5 cups of peanuts mixed with 3 cups of raisins. Are the ratios equivalent for the two mixes? Explain your reasoning.
3. For each object, choose an appropriate scale for a drawing that fits on a regular sheet of paper. Not all of the scales on the list will be used.

Objects
a. A person
b. A football field ( 120 yards by $53 \frac{1}{3}$ yards)
c. The state of Washington (about 240 miles by 360 miles)
d. The floor plan of a house
e. A rectangular farm ( 6 miles by 2 mile)

Scales

- $1 \mathrm{in}: 1 \mathrm{ft}$
- $1 \mathrm{~cm}: 1 \mathrm{~m}$
- 1: 1000
- $1 \mathrm{ft}: 1$ mile
- 1:100,000
- $1 \mathrm{~mm}: 1 \mathrm{~km}$
- 1:10,000,000
(From Unit 1, Lesson 12.)

4. Which scale is equivalent to 1 cm to 1 km ?
A. 1 to 1000
B. 10,000 to 1
C. 1 to 100,000
D. 100,000 to 1
E. 1 to 1,000,000
(From Unit 1, Lesson 11.)
5. a. Find 3 different ratios that are equivalent to $7: 3$.
b. Explain why these ratios are equivalent.
