Similar Figures Area
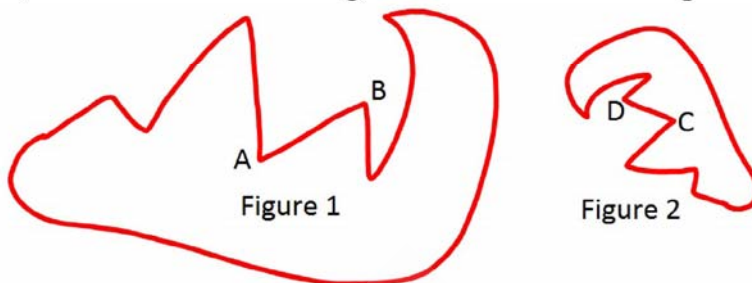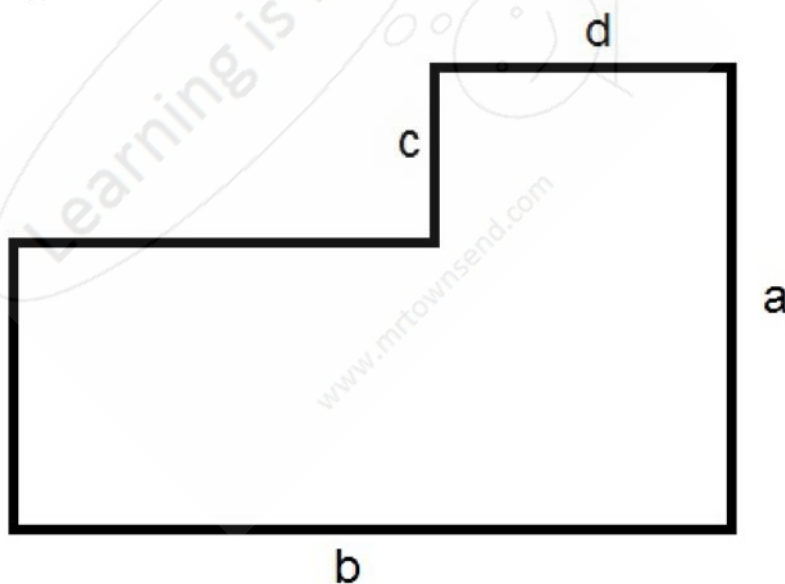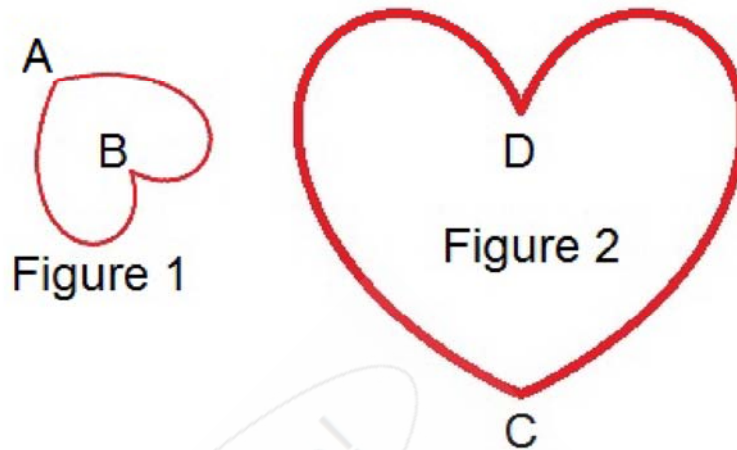
1. The two figures are similar. The length of side $\overline{AB}$ is 40 centimeters and the lenght of the corresponding side of $\overline{DC}$ is 17 centimeters. If the area of figure 2 is 2,109.7 square centimeters, what is the area of figure 1 to the nearest square centimeter?
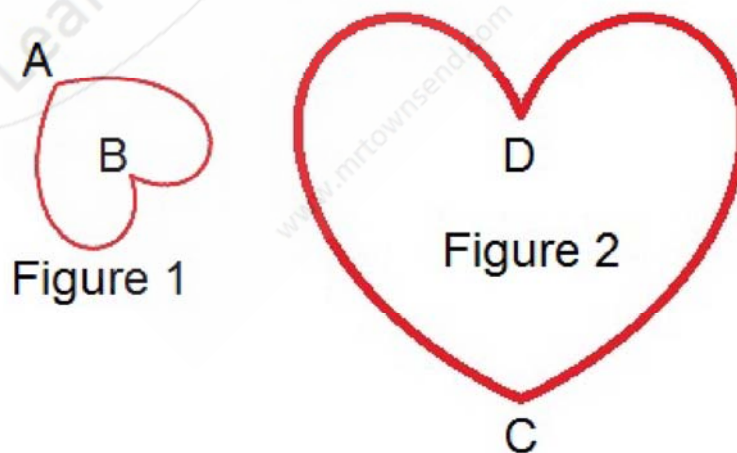

Figure 1   Figure 2

2. You are helping your buddy, Billy, build a deck in his back yard. Billy has made an outline of the deck. Every half an inch inch in the outline is one foot for the actual deck. The lengths, in inches, on the drawing are as follows; a = 8, b = 11, c = 3, and d = 5. How many square feet will the actual deck be?
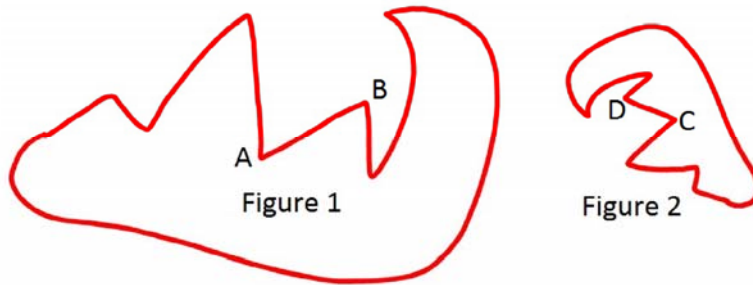
3. The two figures are similar. The length from point A to point B is 10 yards and the lenght of the corresponding part from point C to point D is 48 yards. If the area of figure 2 is 1,036.8 square yards, what is the area of figure 1 to the nearest square yard?
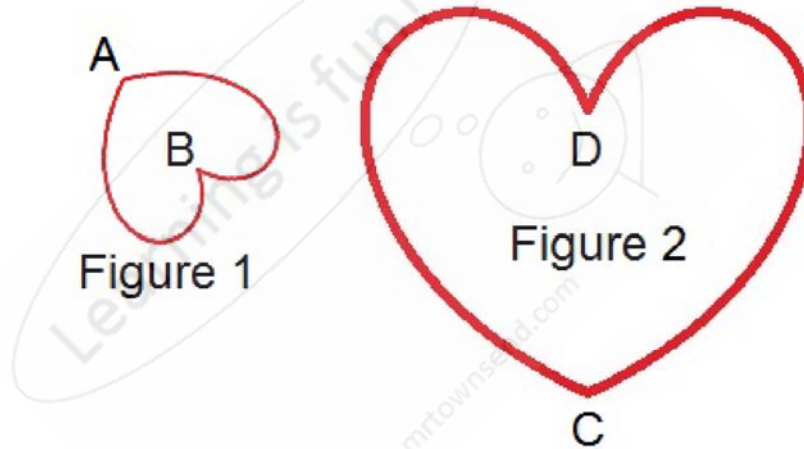
A

B

Figure 1

D

Figure 2

C

4. The two figures are similar. The area of figure 1 is 140.8 square centimeters, and the area of figure 2 is 1267.2 square centimeters. If the length from point A to point B is 16 centimeters, what is the lenght of the corresponding part from point C to point D to the nearest centimeter?
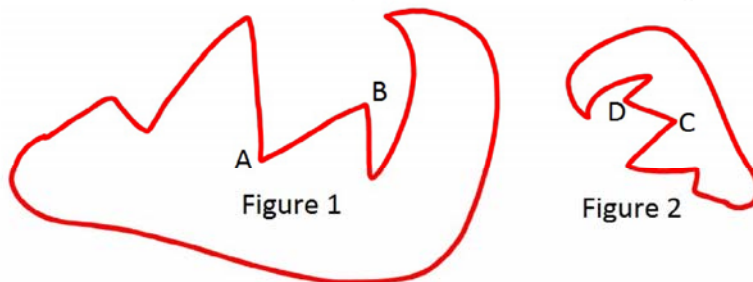
A

B

Figure 1

D

Figure 2

C

5. The two figures are similar. The area of figure 1 is 12,700.8 square meters, and the area of figure 2 is 3,808.8 square meters. If the length of side $\overline{AB}$ is 42 meters, what is the lenght of the corresponding side of $\overline{CD}$ to the nearest meter?

Figure 1   Figure 2

6. The two figures are similar. The area of figure 1 is 88.2 square feet, and the area of figure 2 is 1036.8 square feet. If the length from point C to point D is 48 feet, what is the lenght of the corresponding part from point A to point B to the nearest foot?

Figure 1   Figure 2

7. The two figures are similar. The length of side $\overline{AB}$ is 53 centimeters and the lenght of the corresponding side of $\overline{DC}$ is 22 centimeters. If the area of figure 1 is 17,696.7 square centimeters, what is the area of figure 2 to the nearest square centimeter?

Figure 1   Figure 2

Similar Figures Area
Answer Section

1. ANS: 11,680
2. ANS: 280
3. ANS: 45
4. ANS: 48
5. ANS: 23
6. ANS: 14
7. ANS: 3,049