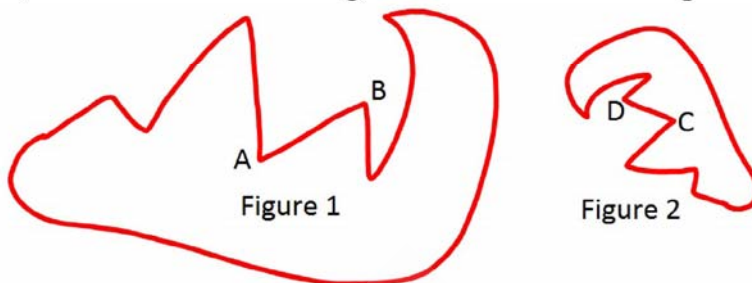
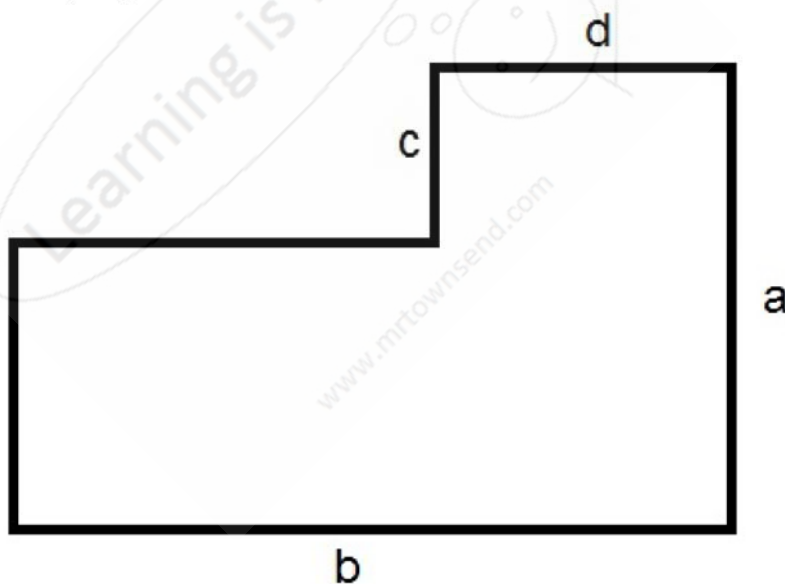


**Similar Figures Area**

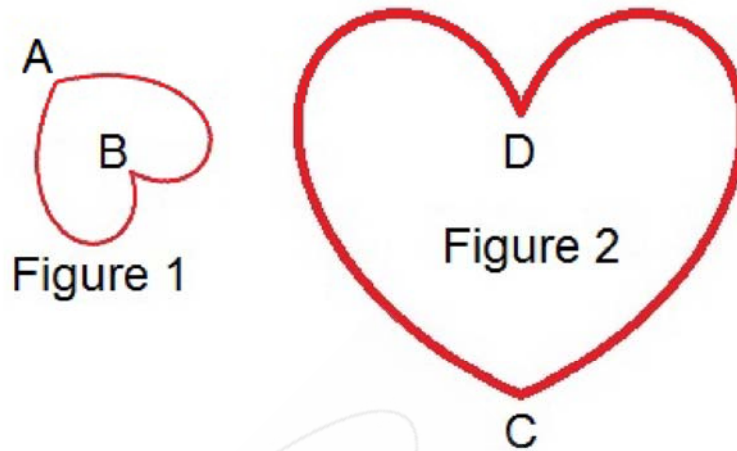
1. The two figures are similar. The length of side  $\overline{AB}$  is 31 centimeters and the length of the corresponding side of  $\overline{DC}$  is 14 centimeters. If the area of figure 1 is 7,207.5 square centimeters, what is the area of figure 2 to the nearest square centimeter?



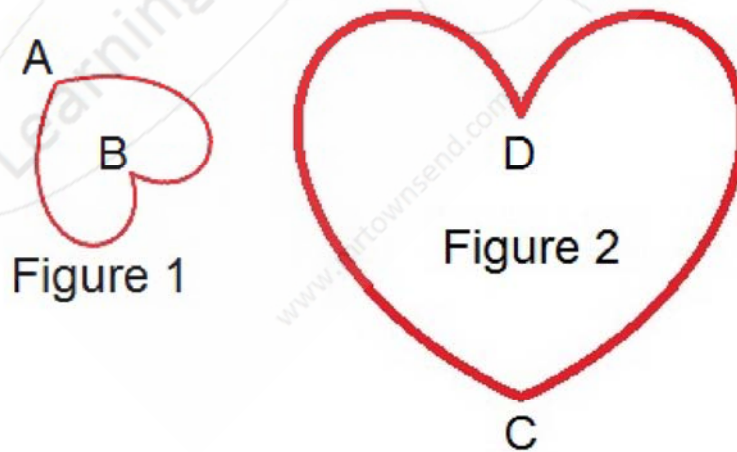
2. You are helping your buddy, Jane, build a deck in her back yard. Jane has made an outline of the deck. Every quarter of an inch in the outline is one foot for the actual deck. The lengths, in inches, on the drawing are as follows;  $a = 6$ ,  $b = 8$ ,  $c = 2$ , and  $d = 3$ . How many square feet will the actual deck be?



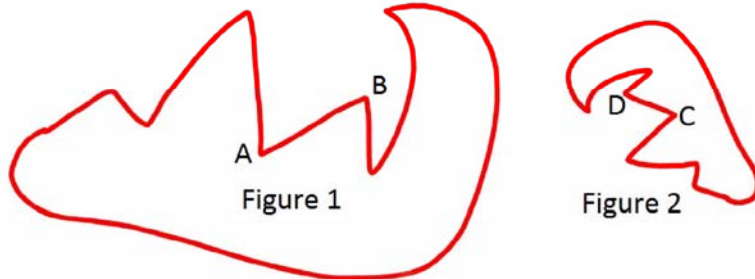
3. The two figures are similar. The length from point A to point B is 6 yards and the length of the corresponding part from point C to point D is 24 yards. If the area of figure 2 is 288 square yards, what is the area of figure 1 to the nearest square yard?



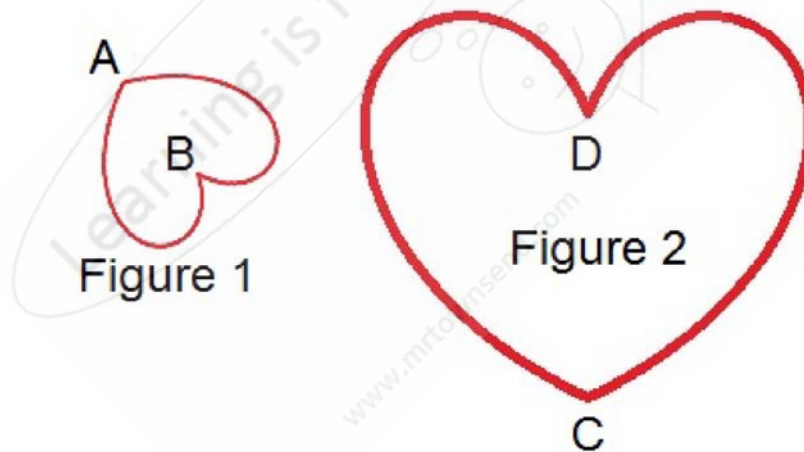
4. The two figures are similar. The area of figure 1 is 17.1 square yards, and the area of figure 2 is 427.5 square yards. If the length from point A to point B is 6 yards, what is the length of the corresponding part from point C to point D to the nearest yard?



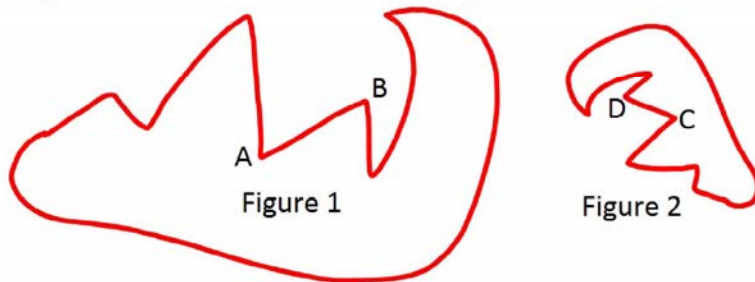
5. The two figures are similar. The area of figure 1 is 22,892.8 square centimeters, and the area of figure 2 is 7,015.3 square centimeters. If the length of side  $\overline{CD}$  is 31 centimeters, what is the length of the corresponding side of  $\overline{AB}$  to the nearest centimeter?



6. The two figures are similar. The area of figure 1 is 472.5 square yards, and the area of figure 2 is 9147.6 square yards. If the length from point C to point D is 132 yards, what is the length of the corresponding part from point A to point B to the nearest yard?



7. The two figures are similar. The length of side  $\overline{AB}$  is 50 yards and the length of the corresponding side of  $\overline{DC}$  is 20 yards. If the area of figure 1 is 16,000.0 square yards, what is the area of figure 2 to the nearest square yard?



### Similar Figures Area Answer Section

1. ANS: 1,470
2. ANS: 608
3. ANS: 18
4. ANS: 30
5. ANS: 56
6. ANS: 30
7. ANS: 2,560

