1. A ladder is 17 feet tall. If it leans against a tree 15 feet above the ground, how far from the base of the tree is the ladder?
2. The diagonal of a rectangle is 13 inches. If its length is 12 in., what is its width?
3. Elisa is walking home and comes to a muddy vacant lot. She can walk along two sides of the rectangular lot or she can walk across the muddy diagonal. The length of the lot is 80 m and the width is 40 m . What is the length of the muddy diagonal?
4. The diagonal of the screen on the TI-Nspire is 9.5 cm . If the width of the screen is 7.5 cm , how tall is the screen?
5. How long is a wire that reaches from the top of a 12 -ft pole to a point on the ground 5 feet from the pole?
6. The competition area for judo is a square mat that measures 16 m on a side. What is the diagonal length of the mat?
7. A rectangular postage stamp is 1.5 inches long and 0.8 inches wide. What is the length of the diagonal?
8. Find the length of a leg of a right triangle if one leg is 17 cm and the hypotenuse is 37 cm .
