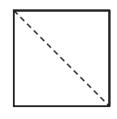
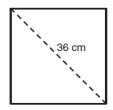
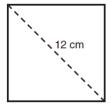
13. The perimeter of the square is 32 centimeters. Calculate the $\underline{\text{exact}}$ length of the diagonal.



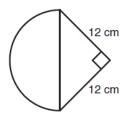
14. The length of a diagonal of the square is 36 centimeters. Calculate the <u>exact</u> length of each side.



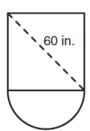
- 15. The length of a diagonal of the square is 12 centimeters.
 - a. Calculate the exact length of each side.
 - b. What is its area?



16. Calculate the area of the figure shown using the information given and following the steps below. The figure is composed of a triangle and a semicircle. Use 3.14 for π .



- a. Find the area of the triangle.
- b. What is the exact diameter of the circle?
- c. What is the exact radius of the circle?
- d. Find the area of the semicircle.
- e. What is the total area?
- 17. The length of the diagonal of the square in the figure shown is 60 inches. The figure is composed of a square and a semicircle.



- a. Calculate the $\underline{\mathsf{exact}}$ length of one side of the square.
- b. What is the exact length of three sides?
- c. What is the exact radius of the circle?
- d. Find the $\underline{\mathsf{exact}}$ circumference of the semicircle.
- e. What is the perimeter of the figure? Round your answer to the nearest hundredth.