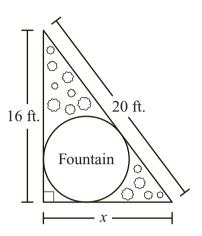
A flower bed in the shape of a right triangle has a circular fountain in it. The flower bed and some of its measurements are shown in the diagram below.



The perimeter of the flower bed is 48 feet.

- a. What is x, the length in feet of the third side of the flower bed? Show or explain how you got your answer.
- b. What is the area, in square feet, of the flower bed, including the fountain? Show or explain how you got your answer.

The circumference of the fountain is 8π feet.

- c. What is the radius, in feet, of the fountain? Show or explain how you got your answer.
- d. What is the area, in square feet, of the flower bed, **not** including the fountain? Show or explain how you got your answer.