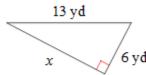
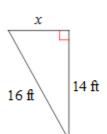
## 8.1: Pythagorean Theorem and Special Right Triangles

Find the missing side lengths of each triangle. Leave your answer in simplest radical form.

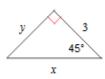
1)



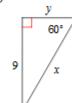
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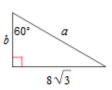
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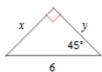
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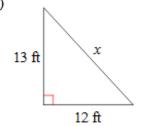
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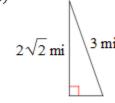
6)



7



8)



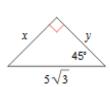




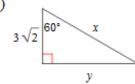
10)



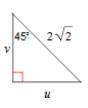
11)



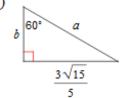
12)



13)



14)



- 15) A shipping dock has a mobile ramp that is used to help load and unload cargo from trucks. The ramp is 125 inches long and has a base that is 120 inches long. What is the height of the ramp?
  - a) Draw and label a sketch of the ramp.
  - b) Find the height of the ramp.
- 16) An extension ladder forming a 60° angle with the ground is placed against an outside wall. The top of the ladder touches a windowsill that is 12 feet high.
  - a) Draw and label a sketch of the ladder along the wall.
  - b) To what length is the ladder extended?
  - c) How far is the base of the ladder from the wall?