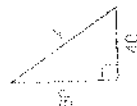


## Practice

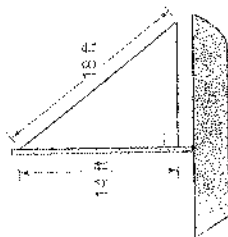
For each diagram, write an equation showing how the Pythagorean theorem could be used to find the value of  $x$ .



Try to find a right triangle in each figure.

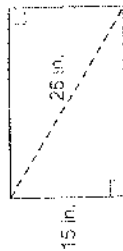
Choose the best answer.

6. The diagram shows a sailboat. What is the approximate area of the sail shown?



- A. 79 square feet  
B. 126 square feet  
C. 158 square feet  
D. 200 square feet

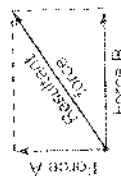
7. This television screen has a 25-inch diagonal and a 15-inch height. What is the area of the screen?



- A. 150 square inches  
B. 300 square inches  
C. 375 square inches  
D. 437 square inches

Solve.

8. **EXAMPLE** If two forces, A and B, pull at right angles from each other, the resultant force can be represented as the diagonal of a rectangle.



If a 21-pound force and a 28-pound force are pulling on an object, and the resultant force is 35 pounds, are the forces pulling at right angles? Explain.

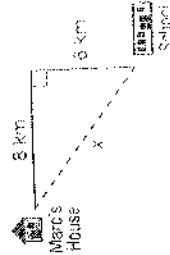
9. **EXAMPLE** Lily has a storage box shaped like a rectangular prism with a length of 4 feet, a width of 3 feet, and a height of 2 feet. She has a fishing pole that is 6 feet long. Can she store the fishing pole in the box? Use words, numbers, and/or diagrams to justify your answer.

Read each problem situation. Then find the missing length,  $x$ . Show your work.

4. A land surveyor uses this diagram to find  $x$ , the length of a lake.



5. The solid lines show Marc's regular route from his house to school. The dashed line shows a shortcut.

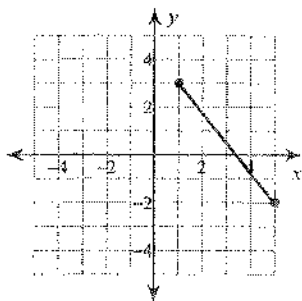


Is  $x$  the length of a leg or a hypotenuse?

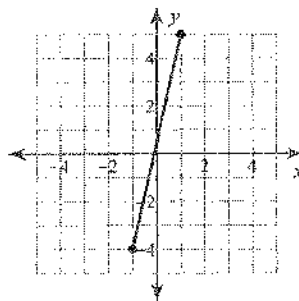
## Assignment

Find the distance between each pair of points.

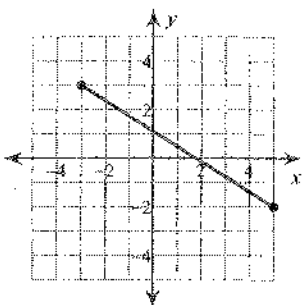
1)



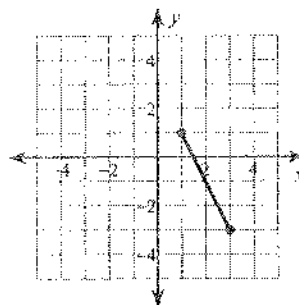
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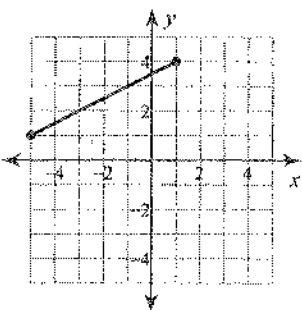
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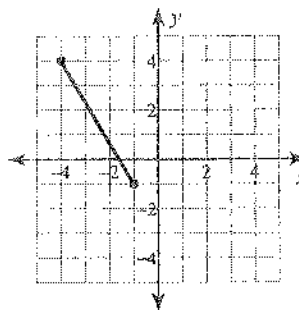
4)



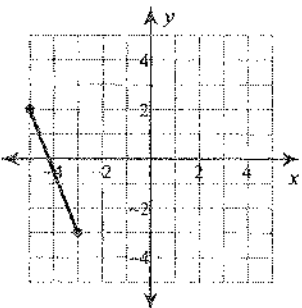
5)



6)



7)



8)

