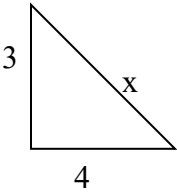
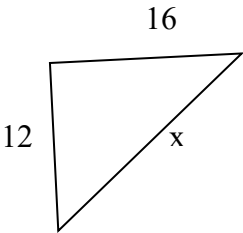
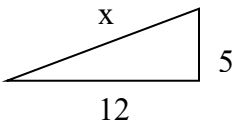
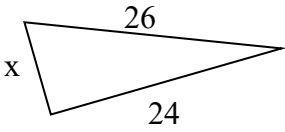


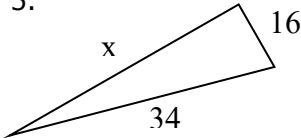
Use the Pythagorean Theorem find  $x$  in problems 1 through 6

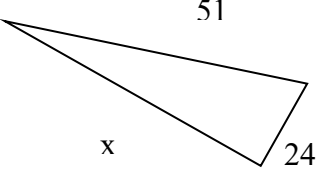
1.  A. 7  
B. 5  
C.  $\sqrt{7}$   
D. 6

2.  A.  $\sqrt{111}$   
B. 11  
C. 20  
D. 14

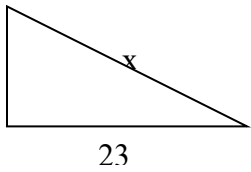
3.  A. 11  
B. 9  
C.  $\sqrt{169}$   
D. 8  
E.

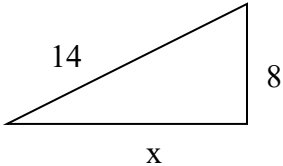
4.  A. 10  
B. 25  
C. 15  
D. 35

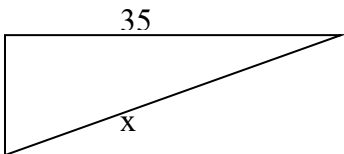
5.  A. 38  
B. 30  
C. 25  
D.  $\sqrt{30}$

6.  A.  $\sqrt{45}$   
B. 37.5  
C. 56  
D. 45

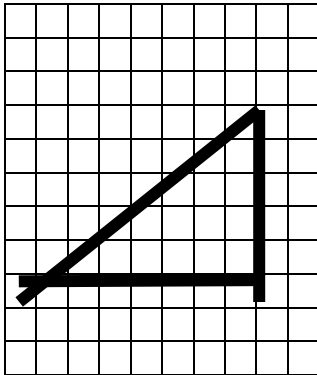
Use the Pythagorean Theorem and a calculator to find  $x$ . Round your answer to the nearest whole number.

7.  A. 23.  
B. 32  
C. 30  
C. 29

8.  A. 11  
B. 16  
C. 22  
D.  $\sqrt{260}$

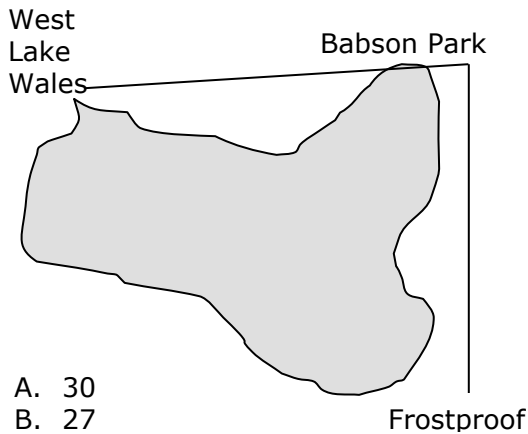
9.  A. 29.  
B. 40  
C. 39  
D. 30

10. What is the approximate length of the hypotenuse in the figure below?



- A. 7
- B. 9
- C. 6
- D. 11

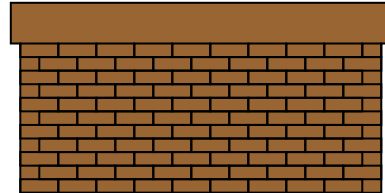
11. West Lake Wales, Babson Park, and Frostproof are all on the shores of Crooked Lake. The roads connecting those towns are perpendicular. The distance between each town is 20 miles. What is the approximate distance across the lake from Frostproof to West Lake Wales?



- A. 30
- B. 27
- C. 28
- D. 29

12. A ramp, 100 feet long, is to be constructed to the top of this 10-foot wall. About how far from the wall should the ramp be placed?

- A. 100 feet
- B. 101 feet
- C. 98 feet
- D. 99 feet



13. Jamie is fencing a corner of his yard for a garden. He has already completed two sides. The shorter side is 27 feet and the longer side is 36 feet. How much more fence will he need for the third side?

- A. 24 feet
- B. 73 feet
- C. 50 feet
- D. 45 feet



14. What is the total amount of fence he needs?

- A. 87 feet.
- B. 136 feet
- C. 108 feet
- D. 113 feet

**Answer Key**

1. B
2. C
3. C
4. A
5. B
6. D
7. C
8. A
9. B
10. B
11. C
12. D
13. D
14. C