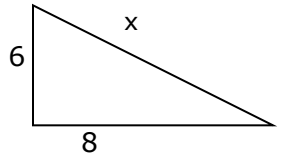
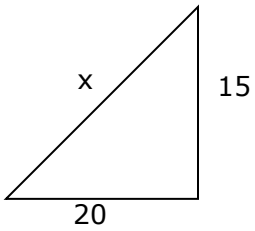
Use the Pythagorean Theorem to find x in problems 1 through 6.

**1.**



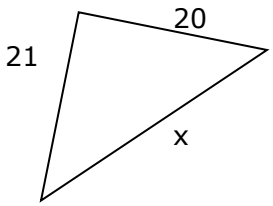

A. 100
B. 10
C. $\sqrt{28}$
D. 28

**2.**



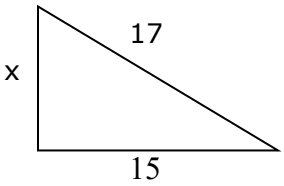

A. $\sqrt{625}$
B. $\sqrt{175}$
C. 34
D. 625

**3.**



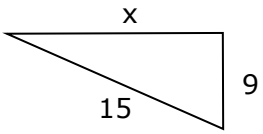

A. 29
B. 41
C. 841
D. $\sqrt{441}$

**4.**



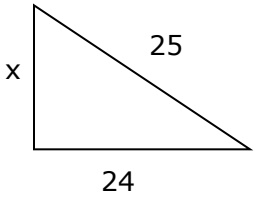

A. 64
B. $\sqrt{514}$
C. 16
D 8

**5.**




A. 17
B $\sqrt{306}$
C. 12
D. 24

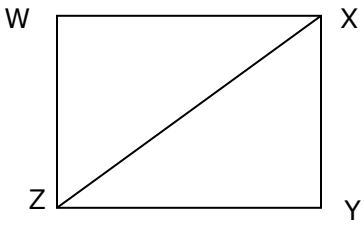
**6.**




A..24.5
B. $\sqrt{49}$
C. $\sqrt{1201}$
D. 15

**Choose the best answer for problem 7. In problems 8-10, use the Pythagorean theorem and a calculator to find x. Then round your answer to the nearest whole number.**

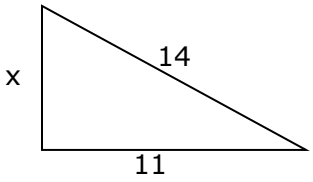
**7.**




If WZ = 11 and ZX = 61, now ıong is ZY?

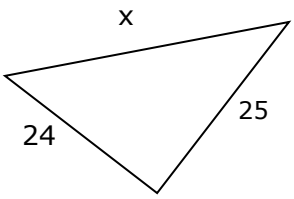
A. 41
B. 60
C. $\sqrt{61}$
D. 121

**8.** Use the Pythagorean theorem and a calculator to find x. Round your answer to the nearest whole number.



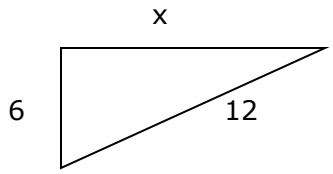

A. 16
B. 10
C. 17
D. 9

**9.**




A. 49
B. 35
C. 34
D. 7

10.




A. 13
B. 14
C. 11
D. 10

**Make a drawing to solve problems 11-14.**

11. Mary drove 5 miles north from her home. Then she drove 12 miles east before driving in a straight line back home. What was the total number of miles that she drove?

A. 13
B. 30
C. 169
D. 25

12. A wire is placed from the top of a 24 foot pole and attached to the ground 10 feet from the pole. How long is the wire?

A. 26 feet
B. 21 feet
C. 30 feet
D. 24 feet

13. If you want to use a 30-foot piece of wire in problem 12, how far from the pole should you place it?

A. 38 feet
B. 18 feet
C. 15 feet
D. 54 feet

14. A diagonal line drawn from corner to corner on an 8 1/2 ″ by 11″ (letter size page) would be

A. Between 13″ and 14″
B. Exactly 11″
C. Between 12″ and 13″
D. Exactly 12″

## Answer Key

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