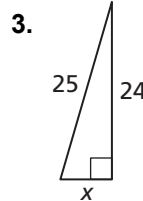
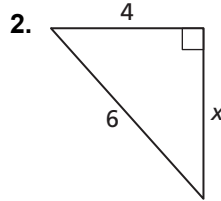
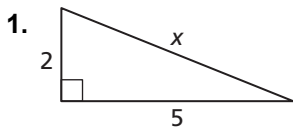


Chapter 9 Test A

Find the value of x . Then tell whether the side lengths form a Pythagorean triple.

Answers



1. _____

2. _____

3. _____

Do the following segment lengths form a triangle? If so, is the triangle *acute*, *obtuse*, or *right*?

4. 2, 4, 8

5. 5, 6, 7

6. 6, 8, 15

7. 9, 12, 15

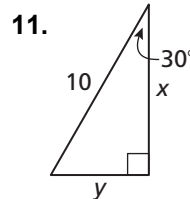
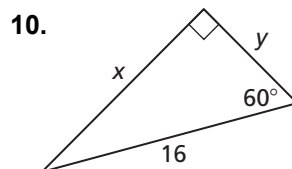
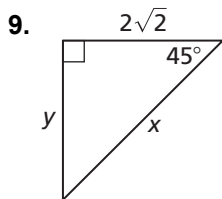
8. A helicopter rose vertically 325 meters and then flew east 500 meters. How far is the helicopter from its starting point?

4. _____

5. _____

6. _____

Find the values of x and y . Write your answers in simplest form.

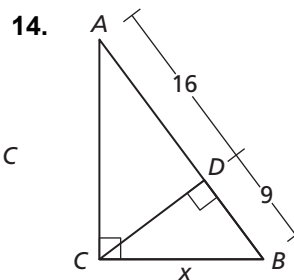
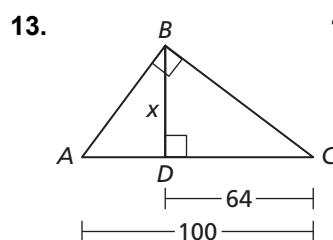
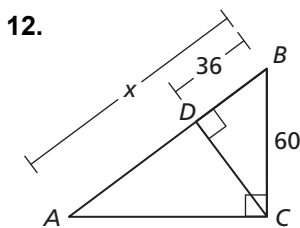


7. _____

8. _____

9. _____

Identify the similar triangles. Then find the value of x .



10. _____

11. _____

12. _____

Find the geometric mean of the two numbers.

15. 15 and 20

16. 4 and 18

17. 3 and 12

13. _____

14. _____

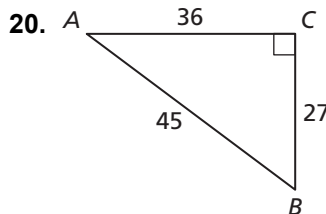
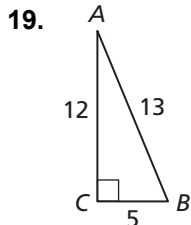
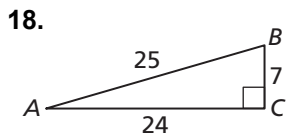
15. _____

16. _____

17. _____

Chapter 9 Test A (continued)

Find $\tan A$ and $\tan B$. Write each answer as a fraction and as a decimal rounded to the nearest hundredth.



Answers

18. _____

19. _____

20. _____

21. _____

22. _____

23. _____

24. _____

25. _____

26. _____

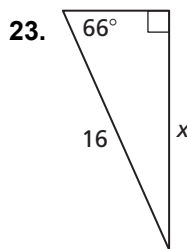
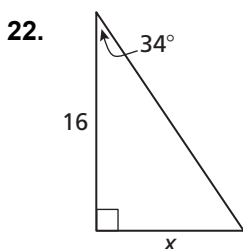
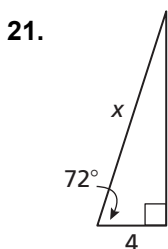
27. _____

28. _____

29. _____

30. _____

Find the value of x . Round your answer to the nearest tenth.



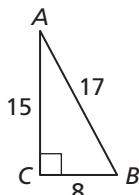
Use the diagram. Write your answer as a fraction and as a decimal rounded to the nearest hundredth.

24. $\sin A$

25. $\cos A$

26. $\sin B$

27. $\cos B$



28. A wheelchair ramp is 4.2 meters long. It rises up 0.7 meter. What is the angle of elevation to the nearest tenth of a degree?

29. You go to the park on a windy day to fly a kite. You have released 40 feet of string. The string makes an angle of 36° with the ground. How high is the kite in the air?

30. A 22-foot ladder is resting against the side of a building. The bottom of the ladder is 3 feet from the building. Find the measure of the angle the ladder makes with the ground. Round your answer to the nearest tenth of a degree.