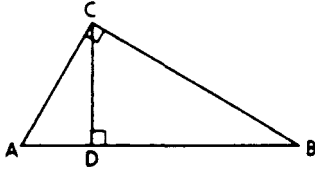


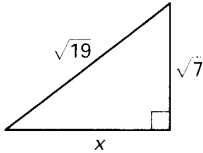
## Chapter 9 Practice Test

1-4  $\angle ACB$  is a right angle,  $\overline{CD}$  is an altitude to  $\overline{AB}$ .

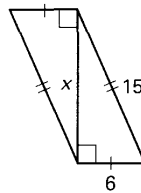


1.  $AC = 9$ ,  $AD = 3$ , find  $BD$       2.  $AC = 6$ ,  $AD = 3$ , find  $BD$       3.  $CD = 8$ ,  $AD = 4$ , find  $BD$
4.  $AD = 2$ ,  $BD = 4$ , find  $CD$

5. Find  $x$ . Leave answer in simplest radical form.



6. Find  $x$ . Leave answer in simplest radical form.



Determine if the following triangles are acute, right, or obtuse.

7.  $6, \sqrt{15}, 5\sqrt{2}$

8.  $6, 8, 10$

9.  $8, 12, 18$

Are the following Pythagorean Triples?

10.  $21, 72, 75$

11.  $\sqrt{3}, \sqrt{4}, \sqrt{5}$

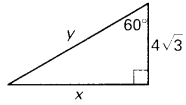
12.  $6, 6, 4$

13. A 50m vertical tower is braced with a cable secured at the top of the tower and tied 30m from the base. What is the angle of elevation from the ground to the top of the vertical tower at this point? Round your answer to the nearest degree.

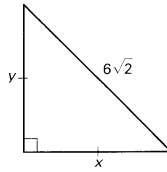
14. A ski slope is 550 yards long with a vertical drop of 130 yards. Find the angle of depression of the slope.

Find the value of each variable. Write your answer in simplest radical form.

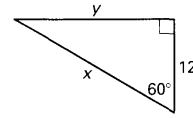
15.



16.

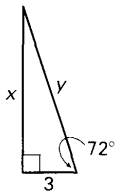


17.

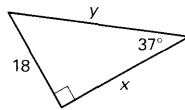


Find the value of each variable. Round lengths of segments to the nearest tenth and angle measures to the nearest degree.

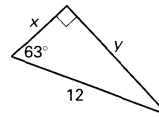
18.



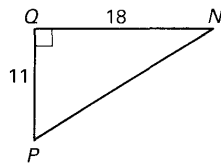
19.



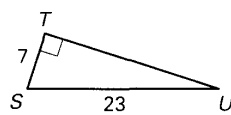
20.



21. Find  $m\angle N$



22. Find  $m\angle S$



23. Find  $m\angle U$

