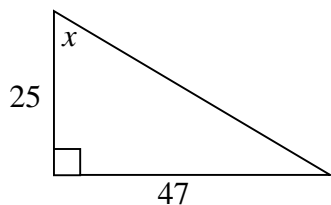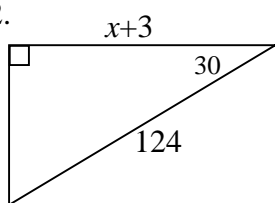Directions: **For each problem, solve for *x*.** All angles are in degrees. Answer all 45-45-90 and 30-60-90
problems in simplest radical form. Round all other problems to tenths. Remember to show the basic
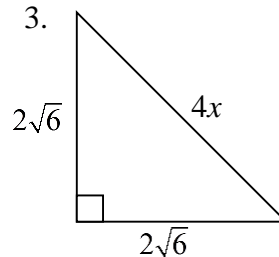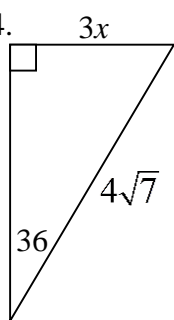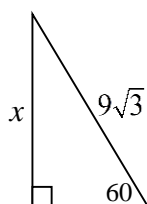equation and calculator-ready form on all trig problems.

1.

x
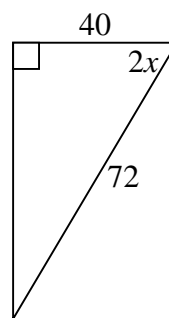
25

47

2.

$x+3$

30

124

3.

$2\sqrt{6}$

$4x$

$2\sqrt{6}$

4.

$3x$

$4\sqrt{7}$

36

5.

x

$9\sqrt{3}$

60

6.

40

$2x$

72

7.

$12\sqrt{6}$

x

60

8.

28

$3x$

56

9.

$x-6$

30

23

10.

x

57

41

11.

x

$7\sqrt{6}$

x

12.

24

$2x$

37

Continue on back ➔

13.

x

$3\sqrt{10}$

x

14.

$3x$

56

28

15.

24

37

$2x$

16.

57

x

41

17.

12

x

60

18.

x

30

15
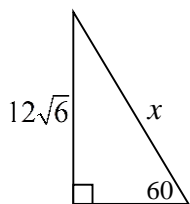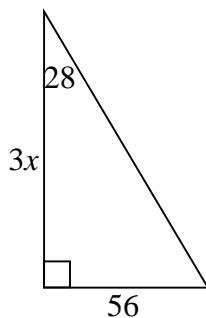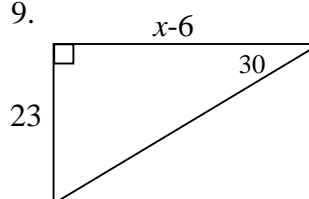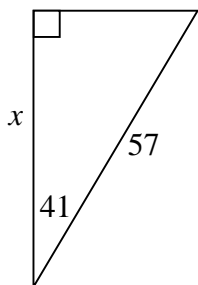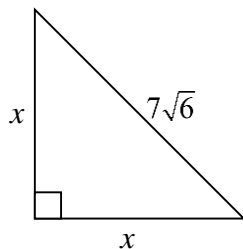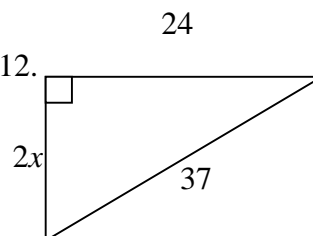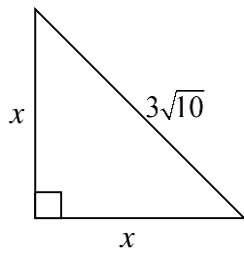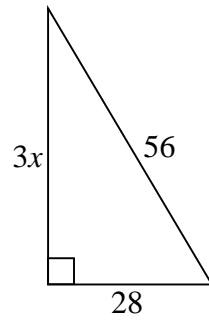
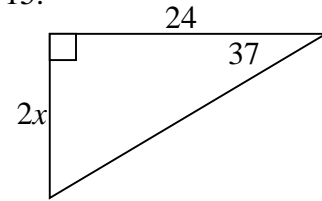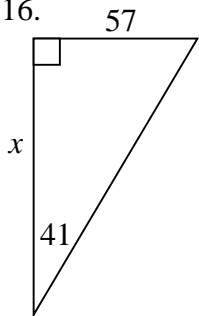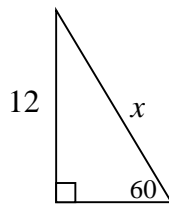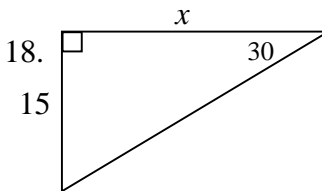Directions: Show all work neatly on this paper. All angles are in degrees. Remember to show the basic equation and calculator-ready form on all trig problems.

Read carefully. Draw a correct picture. Show all work. Round to hundredths.

19.   Find the angle of elevation of a kite using 150 feet of string to attain a height of 93 feet.

20.   An airplane is 23 miles from its landing. The angle of depression to the landing is 12 degrees. Find the altitude of the airplane.