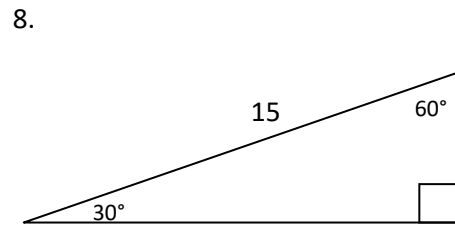
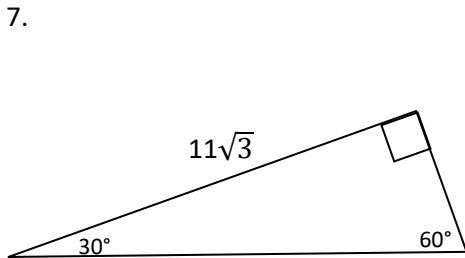
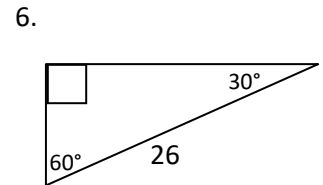
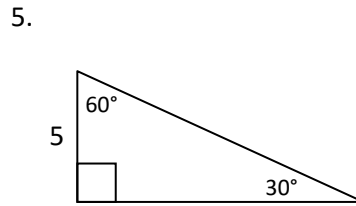
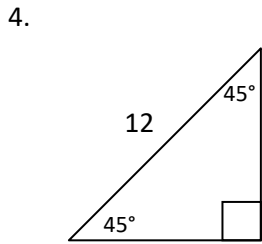
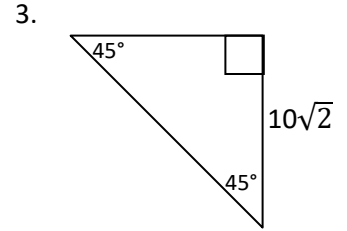
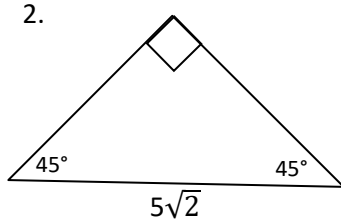
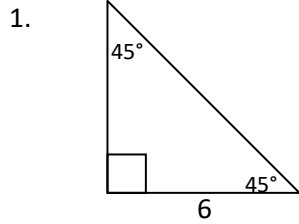


Study Guide #6

Lessons Covered: #21 Special Right Triangles (45-45-90), #22 Special Right Triangles (30-60-90), #23 Trig ratios (sides) #24 Trig ratios (angles)

Name: _____ Date: _____ Period: _____

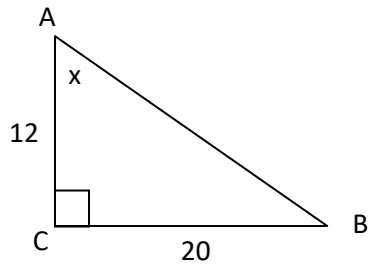
Find the missing sides in each special triangle



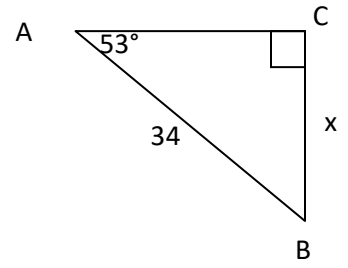
What are the three trig ratios?

Find x in each diagram using trig ratios

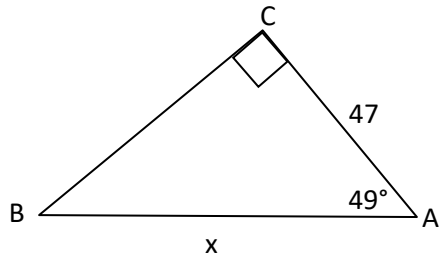
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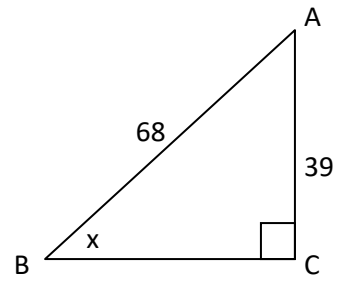
10.



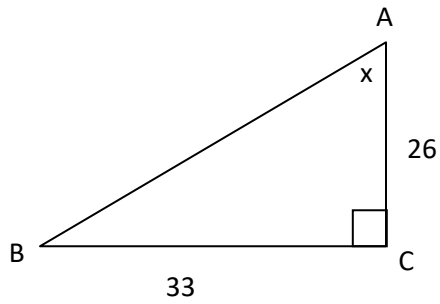
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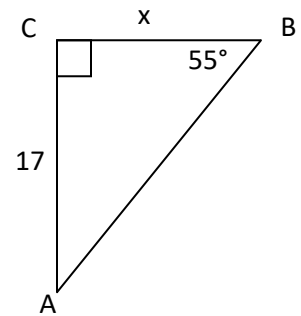
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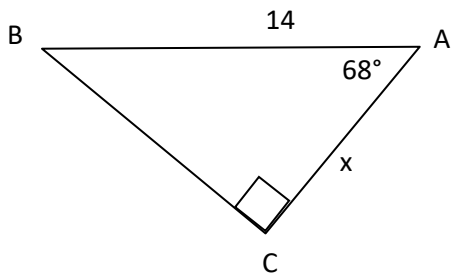
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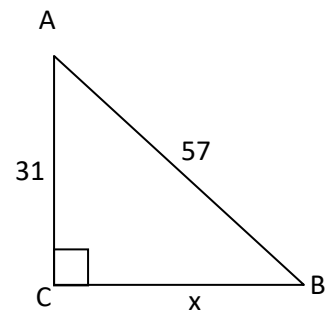
14.



15.



16.



Review

17. Simplify $\sqrt{80}$

18. Simplify $\sqrt{135}$

19. Simplify $\sqrt{\frac{12}{5}}$

20. Simplify $\sqrt{\frac{14}{2}}$

21. Find the midpoint (5, 6) and (-2, 11)

22. Find the distance (-8, 3) and (7, 11)

23. Use Quadratic Formula to solve $6x^2 + 9x - 6 = 0$

24. B is between A and C. If $AC = 90$, $AB = 4x + 10$, and $BC = 6x - 20$, find x .

25. A is interior to $\angle BCD$. $m\angle BCD = 6x - 16$, $m\angle BCA = 3x + 8$, $m\angle ACD = x - 2$. Solve for x

26. Construct each angle

80°

115°

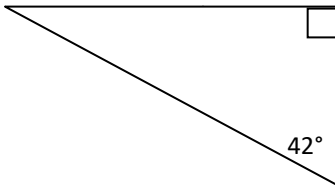
35°

27. An angle is 15° less than four times its supplement. Find the angle? Find the supplement?

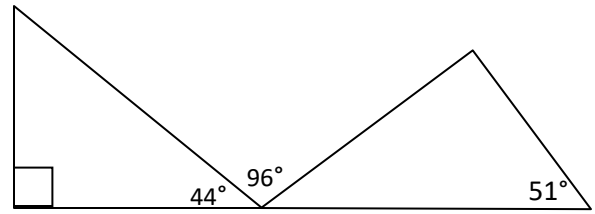
28. An angle is 10° less than three its complement. What's the angle? What is the complement?

Find the missing angles

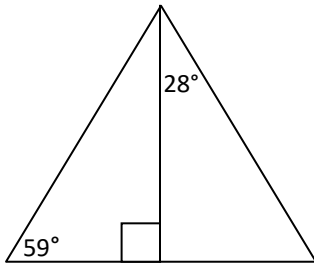
29.



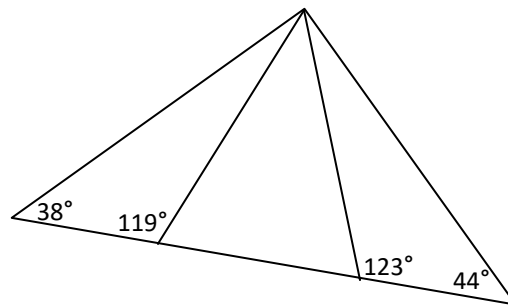
30.



31.



32.



Classify each triangle as right, acute or obtuse

33. 4, 6, 7

34. 11, 15, 24

35. 9, 12, 15

36. 15, 21, 22

37. 14, 30, 34

38. 7, 8, 13