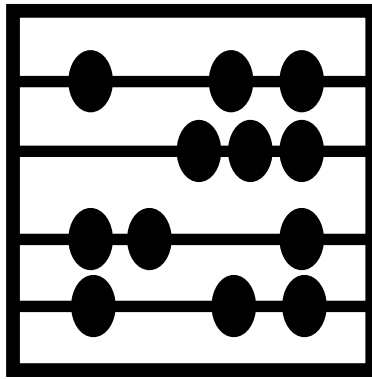

45-45-90 Triangles



Geometry

Practice Worksheet

Practice you can't find anywhere else

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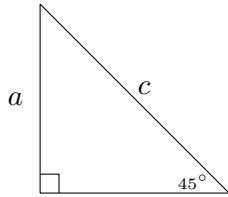
www.TutoringbyMatthew.com



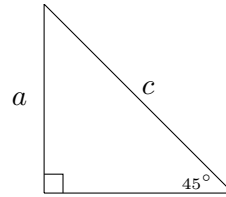
Solve the 45-45-90 triangle for the indicated side.

Type 1: Leg is given

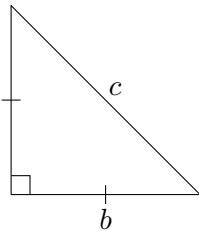
1. If $a = 3$, solve for c .



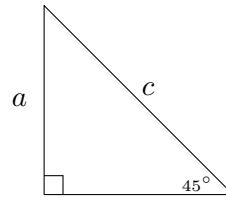
2. If $a = 6$, solve for c .



3. If $b = 7$, solve for c .

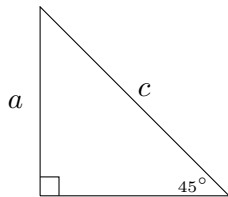


4. If $a = 11$, solve for c .

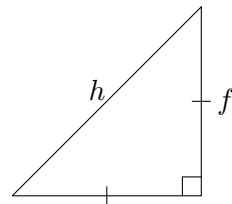


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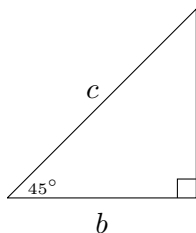
5. If $a = 6\sqrt{2}$, solve for c .



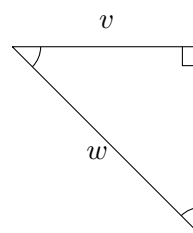
6. If $f = 2\sqrt{2}$, solve for h .



7. If $b = 7\sqrt{2}$, solve for c .



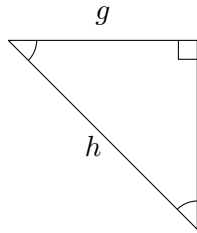
8. If $v = 11\sqrt{2}$, solve for w .



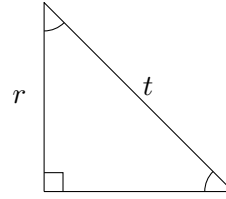


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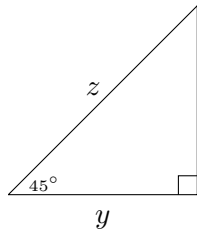
9. If $g = \sqrt{8}$, solve for h .



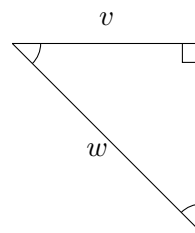
10. If $r = \sqrt{50}$, solve for t .



11. If $y = 5\sqrt{32}$, solve for z .

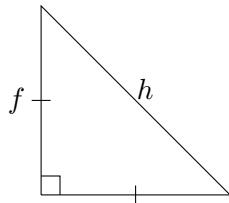


12. If $v = 9\sqrt{98}$, solve for w .

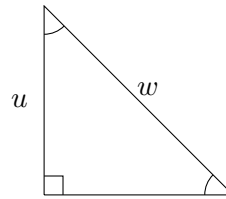


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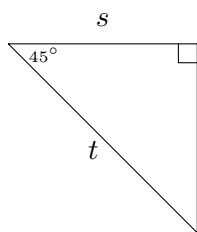
13. If $f = 3\sqrt{6}$, solve for h .



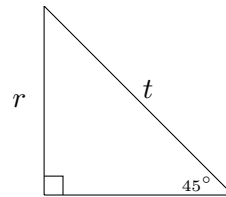
14. If $u = 2\sqrt{6}$, solve for w .



15. If $s = 2\sqrt{10}$, solve for t .

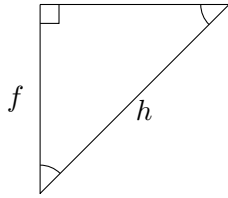


16. If $r = 5\sqrt{14}$, solve for t .

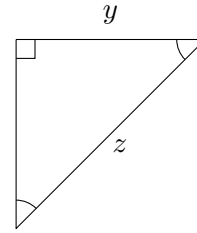




17. If $f = 4\sqrt{22}$, solve for h .

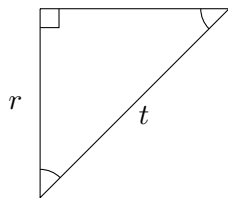


18. If $y = 7\sqrt{34}$, solve for z .

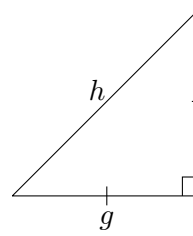


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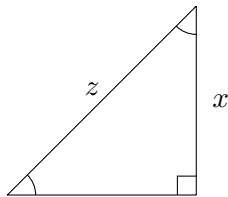
19. If $r = \sqrt{45}$, solve for t .



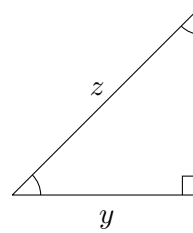
20. If $g = \sqrt{75}$, solve for h .



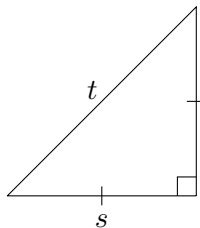
21. If $x = \sqrt{80}$, solve for z .



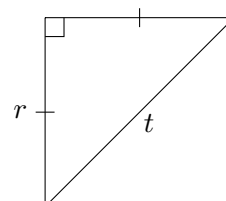
22. If $y = 3\sqrt{36}$, solve for z .



23. If $s = 6\sqrt{108}$, solve for t .



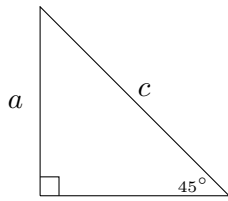
24. If $r = 5\sqrt{120}$, solve for t .



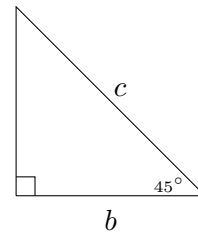


Type 2: Hypotenuse is given

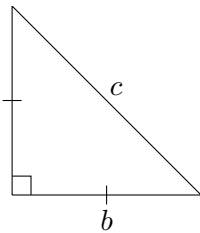
25. If $c = 5\sqrt{2}$, solve for a .



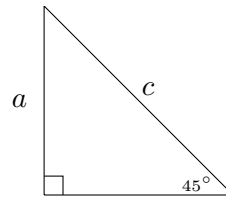
26. If $c = 2\sqrt{2}$, solve for b .



27. If $c = 9\sqrt{2}$, solve for b .

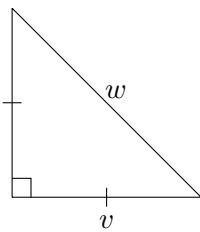


28. If $c = 18\sqrt{2}$, solve for a .

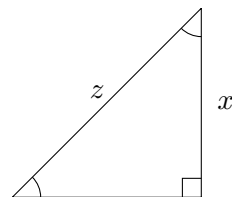


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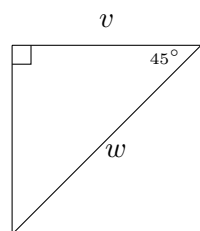
29. If $w = \sqrt{72}$, solve for v .



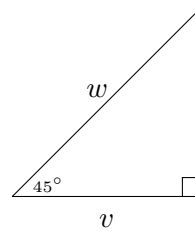
30. If $z = \sqrt{128}$, solve for x .



31. If $w = 9\sqrt{50}$, solve for v .

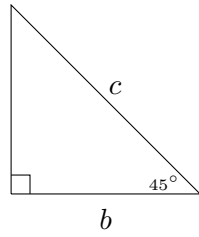


32. If $w = 13\sqrt{98}$, solve for v .

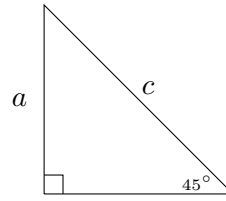




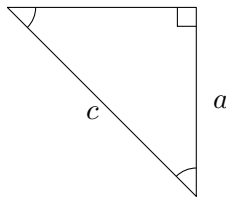
... 33. If $c = 6$, solve for b .



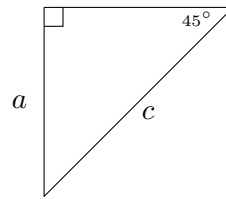
34. If $c = 8$, solve for a .



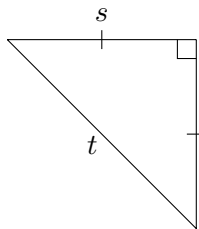
35. If $c = 14$, solve for a .



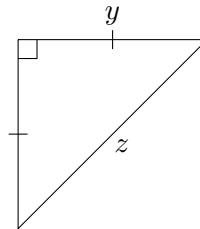
36. If $c = 20$, solve for a .



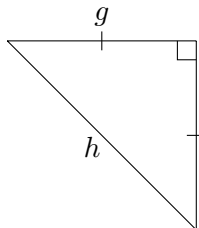
... 37. If $t = 5\sqrt{6}$, solve for s .



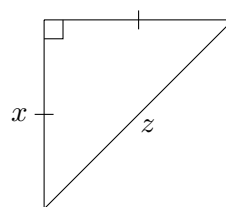
38. If $z = 8\sqrt{6}$, solve for y .



39. If $h = 11\sqrt{14}$, solve for g .



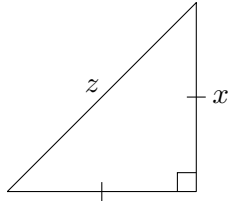
40. If $z = 15\sqrt{26}$, solve for x .



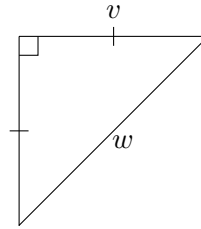


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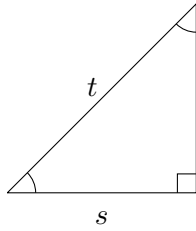
41. If $z = 4\sqrt{3}$, solve for x .



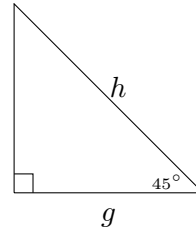
42. If $w = 12\sqrt{3}$, solve for v .



43. If $t = 16\sqrt{5}$, solve for s .

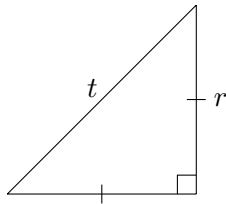


44. If $h = 28\sqrt{7}$, solve for g .

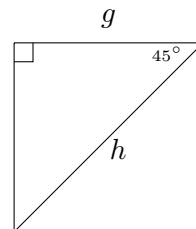


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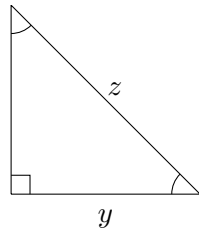
45. If $t = \sqrt{90}$, solve for r .



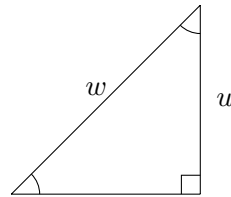
46. If $h = \sqrt{68}$, solve for g .



47. If $z = 5\sqrt{80}$, solve for y .



48. If $w = 4\sqrt{125}$, solve for u .



Type 1: Leg is given

1. $c = 3\sqrt{2}$

2. $c = 6\sqrt{2}$

3. $c = 7\sqrt{2}$

4. $c = 11\sqrt{2}$

5. $c = 12$

6. $h = 4$

7. $c = 14$

8. $w = 22$

9. $h = 4$

10. $t = 10$

11. $z = 40$

12. $w = 126$

13. $h = 6\sqrt{3}$

14. $w = 4\sqrt{3}$

15. $t = 4\sqrt{5}$

16. $t = 10\sqrt{7}$

17. $h = 8\sqrt{11}$

18. $z = 14\sqrt{17}$

19. $t = 3\sqrt{10}$

20. $h = 5\sqrt{6}$



21. $z = 4\sqrt{10}$

22. $z = 18\sqrt{2}$

23. $t = 36\sqrt{6}$

24. $t = 20\sqrt{15}$

Type 2: Hypotenuse is given

25. $a = 5$

26. $b = 2$

27. $b = 9$

28. $a = 18$

29. $v = 6$

30. $x = 8$

31. $v = 45$

32. $v = 91$

33. $b = 3\sqrt{2}$

34. $a = 4\sqrt{2}$

35. $a = 7\sqrt{2}$

36. $a = 10\sqrt{2}$

37. $s = 5\sqrt{3}$

38. $y = 8\sqrt{3}$

39. $g = 11\sqrt{7}$

40. $x = 15\sqrt{13}$



41. $x = 2\sqrt{6}$

42. $v = 6\sqrt{6}$

43. $s = 8\sqrt{10}$

44. $g = 14\sqrt{14}$

45. $r = 3\sqrt{5}$

46. $g = \sqrt{34}$

47. $y = 10\sqrt{10}$

48. $u = 10\sqrt{10}$