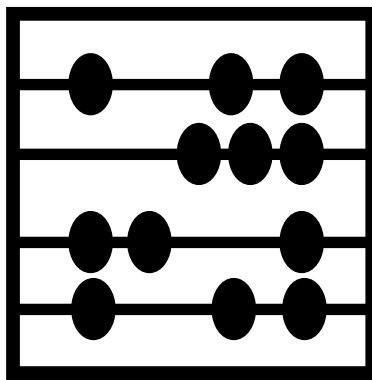


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# Pythagorean Theorem



Geometry

Practice Worksheet

*Practice you can't find anywhere else*

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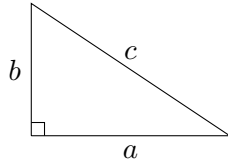
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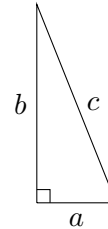
Solve the right triangle for the indicated side.

Type 1: Both legs are given

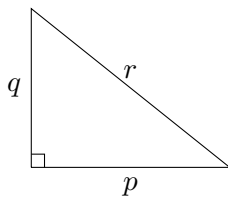
1. If  $a = 6$  and  $b = 4$ , solve for  $c$ .



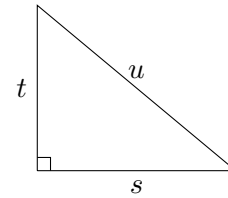
2. If  $a = 4$  and  $b = 10$ , solve for  $c$ .



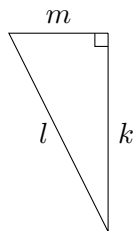
3. If  $p = 10$  and  $q = 8$ , solve for  $r$ .



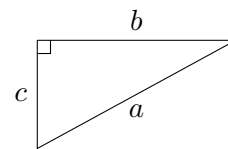
4. If  $s = 12$  and  $t = 10$ , solve for  $u$ .



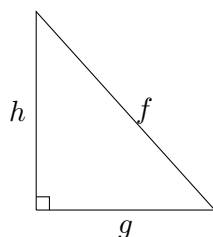
5. If  $m = 8$  and  $k = 16$ , solve for  $l$ .



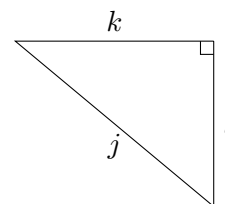
6. If  $b = 22$  and  $c = 12$ , solve for  $a$ .



7. If  $g = 18$  and  $h = 20$ , solve for  $f$ .

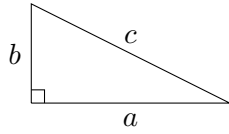


8. If  $k = 24$  and  $l = 20$ , solve for  $j$ .

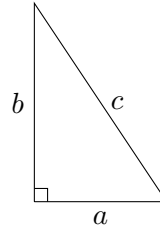




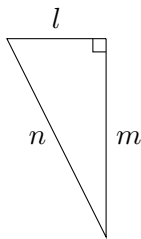
9. If  $a = 6$  and  $b = 3$ , solve for  $c$ .



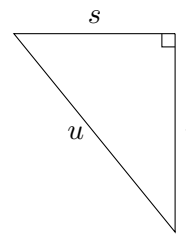
10. If  $a = 6$  and  $b = 9$ , solve for  $c$ .



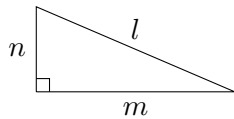
11. If  $l = 5$  and  $m = 10$ , solve for  $n$ .



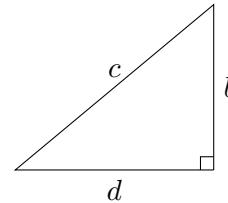
12. If  $s = 13$  and  $t = 16$ , solve for  $u$ .



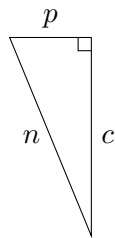
13. If  $m = 21$  and  $n = 9$ , solve for  $l$ .



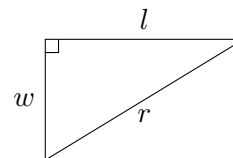
14. If  $d = 18$  and  $b = 15$ , solve for  $c$ .



15. If  $p = 7$  and  $c = 17$ , solve for  $n$ .



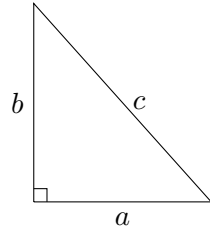
16. If  $l = 23$  and  $w = 14$ , solve for  $r$ .



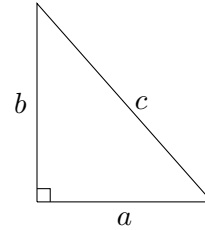


Type 2: Hypotenuse and a leg are given

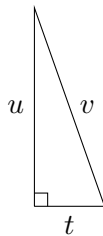
17. If  $a = 4$  and  $c = 6$ , solve for  $b$ .



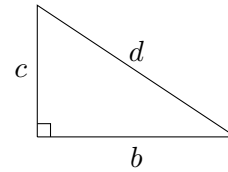
18. If  $b = 6$  and  $c = 8$ , solve for  $a$ .



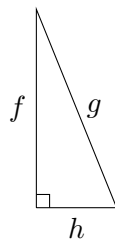
19. If  $t = 4$  and  $v = 12$ , solve for  $u$ .



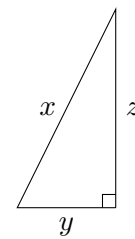
20. If  $b = 10$  and  $d = 12$ , solve for  $c$ .



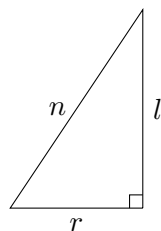
21. If  $h = 6$  and  $g = 16$ , solve for  $f$ .



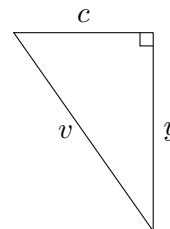
22. If  $y = 8$  and  $x = 18$ , solve for  $z$ .



23. If  $r = 10$  and  $n = 18$ , solve for  $l$ .



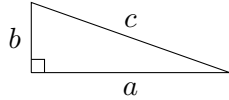
24. If  $y = 18$  and  $v = 22$ , solve for  $c$ .



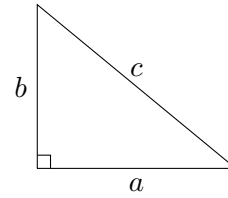


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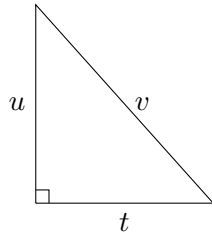
25. If  $b = 3$  and  $c = 9$ , solve for  $a$ .



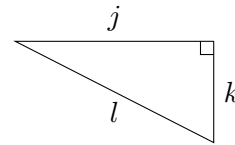
26. If  $b = 7$  and  $c = 11$ , solve for  $a$ .



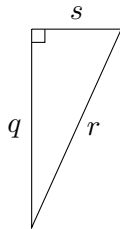
27. If  $t = 6$  and  $v = 9$ , solve for  $u$ .



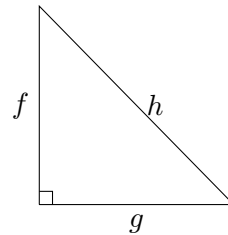
28. If  $k = 5$  and  $l = 11$ , solve for  $j$ .



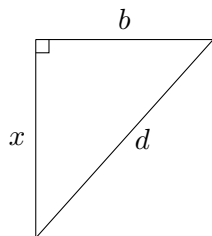
29. If  $s = 7$  and  $r = 17$ , solve for  $q$ .



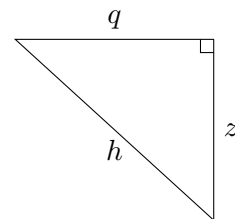
30. If  $f = 15$  and  $h = 21$ , solve for  $g$ .



31. If  $b = 14$  and  $d = 21$ , solve for  $x$ .



32. If  $q = 17$  and  $h = 23$ , solve for  $z$ .



Type 1: Both legs are given

1.  $c = 2\sqrt{13}$

2.  $c = 2\sqrt{29}$

3.  $r = 2\sqrt{41}$

4.  $u = 2\sqrt{61}$

5.  $l = 8\sqrt{5}$

6.  $a = 2\sqrt{157}$

7.  $f = 2\sqrt{181}$

8.  $j = 4\sqrt{61}$

9.  $c = 3\sqrt{5}$

10.  $c = 3\sqrt{13}$

11.  $n = 5\sqrt{5}$

12.  $u = 5\sqrt{17}$

13.  $l = 3\sqrt{58}$

14.  $c = 3\sqrt{61}$

15.  $n = 13\sqrt{2}$

16.  $r = 5\sqrt{29}$

Type 2: Hypotenuse and a leg are given

17.  $b = 2\sqrt{5}$

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

19.  $u = 8\sqrt{2}$



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

21.  $f = 2\sqrt{55}$

22.  $z = 2\sqrt{65}$

23.  $l = 4\sqrt{14}$

24.  $c = 4\sqrt{10}$

25.  $a = 6\sqrt{2}$

26.  $a = 6\sqrt{2}$

27.  $u = 3\sqrt{5}$

28.  $j = 4\sqrt{6}$

29.  $q = 4\sqrt{15}$

30.  $g = 6\sqrt{6}$

31.  $x = 7\sqrt{5}$

32.  $z = 4\sqrt{15}$