

Checking whether a triangle is right-angled



Identify the longest side, then use $a^2 + b^2 = c^2$ to check if the triangle is right-angled.

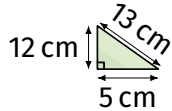
Name _____

Date _____

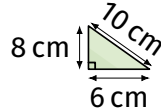
Check for equality

Identify the longest side. Square all three sides. If $a^2 + b^2 = c^2$ exactly, the triangle is right-angled.

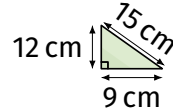
1. Is this triangle right-angled?



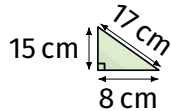
2. Is this triangle right-angled?



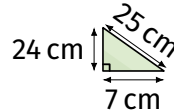
3. Is this triangle right-angled?



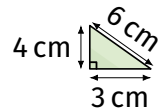
4. Is this triangle right-angled?



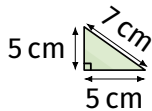
5. Is this triangle right-angled?



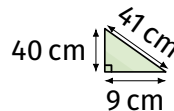
6. Is this triangle right-angled?



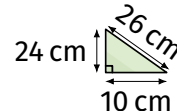
7. Sides: 5, 5, 7. Right-angled?



8. Sides: 40, 9, 41. Right-angled?



9. Sides: 10, 24, 26. Right-angled?



Checking whether a triangle is right-angled



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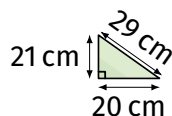
Name _____

Date _____

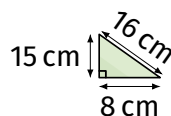
Check for equality

Identify the longest side. Square all three sides. If $a^2 + b^2 = c^2$ exactly, the triangle is right-angled.

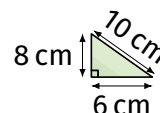
10. Is this a Pythagorean triple?



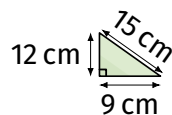
11. Close check: sides 8, 15, 16.



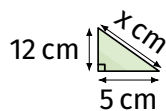
12. Scale factor? 6, 8, 10 is $k \times (3, 4, 5)$.



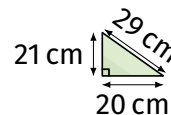
13. Scale factor? 9, 12, 15 is $k \times (3, 4, 5)$.



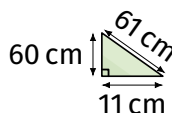
14. Find x . This is a 5-12-13 triple.



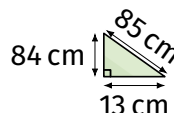
15. Show equality. Is this right-angled?



16. Sides 11, 60, 61. Triple?



17. Sides 13, 84, 85. Triple?



18. Explain: why is $3^2 + 4^2 = 5^2$?

