Various Methods for Determining Sides on Triangles

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| --- | --- | --- | --- |
| Pythagorean Theorem | Similar Triangles | Special Triangles | Trigonometry |
| What you want: To find a side lengthWhat you need:A right triangle& 2 of the sidesFormula:  | What you want: To find a side lengthWhat you need:2 trianglesTo know triangles are ~Setup Example:

|  |  |  |  |
| --- | --- | --- | --- |
| Scale | 1st | Last | Out |
|  |  |  |  |
|  |  |  |  |

 |  ORWhat you want: To find a side lengthWhat you need:30-60-90 or 45-45-901 of the sides | What you want: To find a side lengthWhat you need:A right triangle1 other angle1 of the sidesFormulas: |

For each problem, decide which method from above will solve the problem, then solve it.

|  |  |  |  |
| --- | --- | --- | --- |
| 1. | 2. | 3. | 4. |
| 5. | 6. | 7. | 8. |
| 9. | 10. | 11. | 12. |
| 13. | 14. | 15. | 16. |