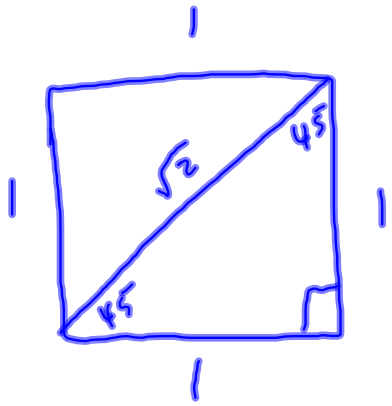
Special Triangles 45-45-90



$1^2 + 1^2 = c^2$

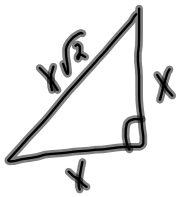
$2 = c^2$

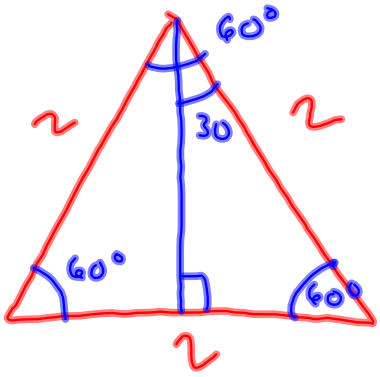
$\sqrt{2} = \sqrt{c^2}$

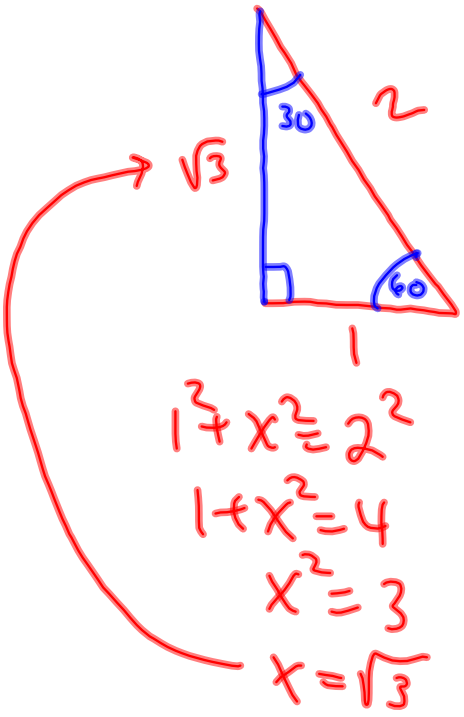
$\sqrt{2} = c$

Isosceles

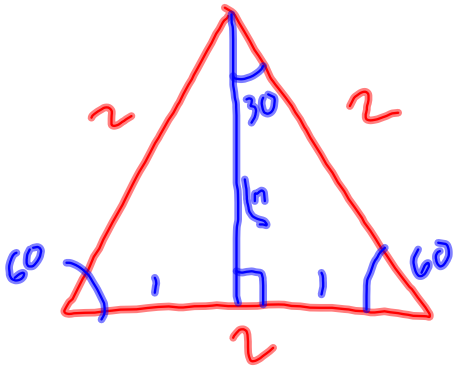
hypotenuse = $\sqrt{2}$ * leg




60°
30
2
2
60°
60°
2


√3
30
2
60
1
$1^2 + x^2 = 2^2$
$1 + x^2 = 4$
$x^2 = 3$
$x = \sqrt{3}$

Special Triangles 30-60-90



$2^2 = x^2 + 1^2$

$3 = x^2$

$x = \sqrt{3}$

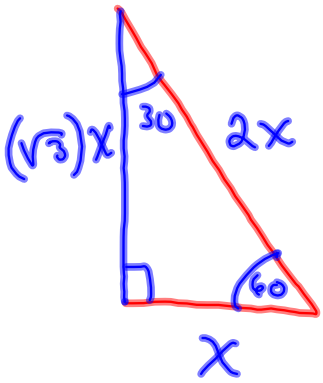
short leg, long leg, hypotenuse

↓ opp 30° ∠ ↓ opp 60° ∠

---

hyp = twice short leg

long leg = $\sqrt{3}$ * short leg



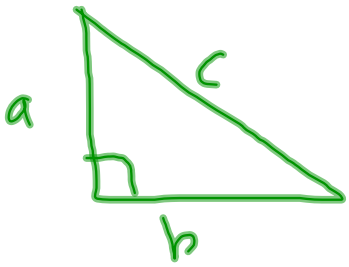
Jul 30-10:55 AM

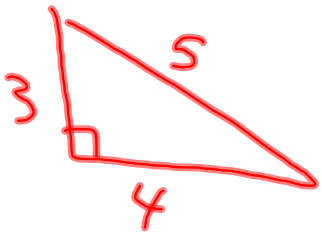
Special Triangles

Pythagorean triples

$a^2+b^2=c^2$

a, b, c are integers





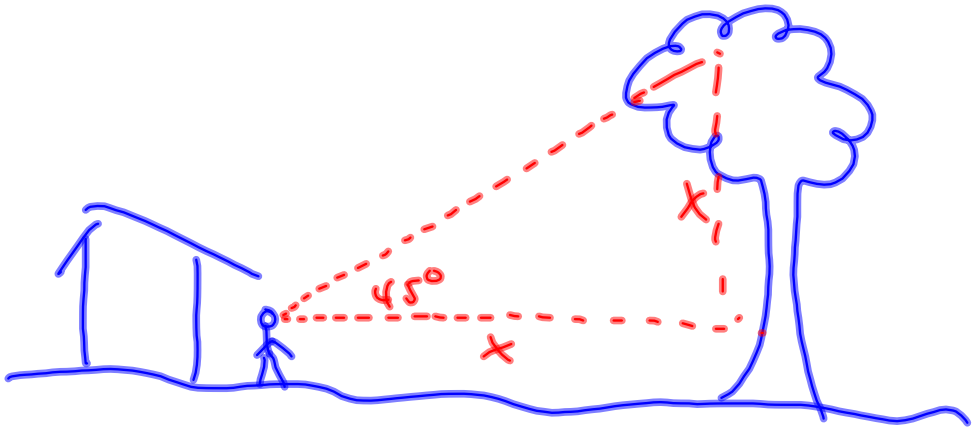
5, 12, 13

3x, 4x, 5x

15, 20, 25

5x, 12x, 13x

15, 36, 39



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