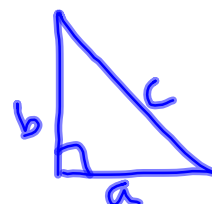
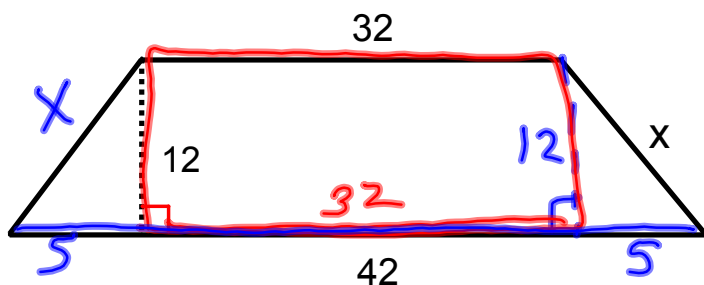


Do-now: Determine the length of x in the isosceles trapezoid below.

What is the name of the dashed segment?

altitude



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

$$12^2 + 5^2 = x^2$$

$$144 + 25 = x^2$$

$$169 = x^2$$

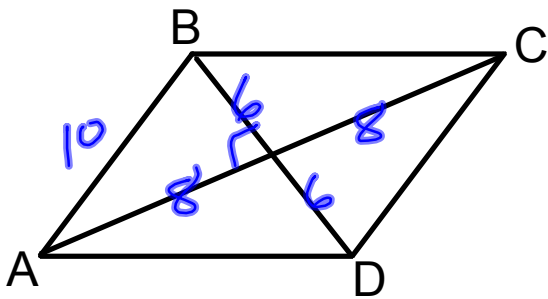
$$13 = x$$

Pythagorean Triples

5, 12, 13

3, 4, 5

In the rhombus below, $AC = 16$ and $BD = 12$. What is the length of AB ?



$$6^2 + 8^2 = c^2$$

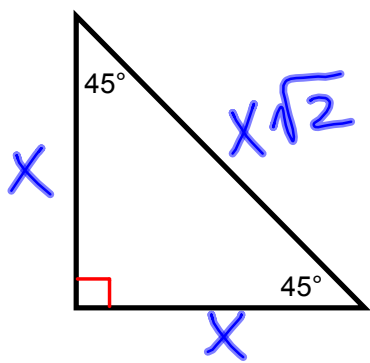
$$36 + 64 = c^2$$

$$100 = c^2$$

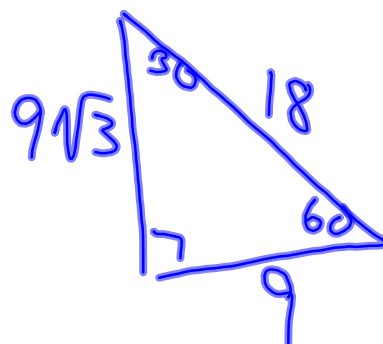
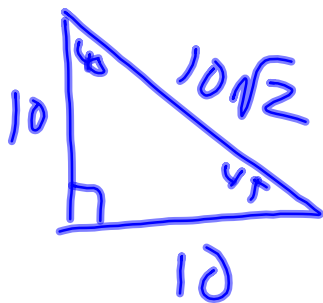
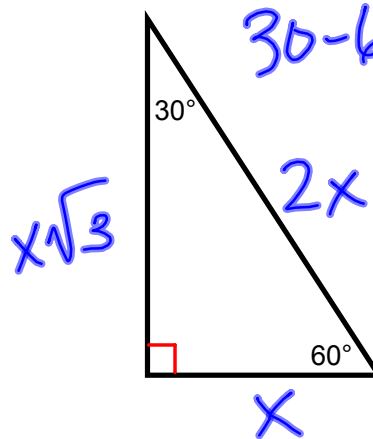
$$10 = c$$

SPECIAL RIGHT TRIANGLES

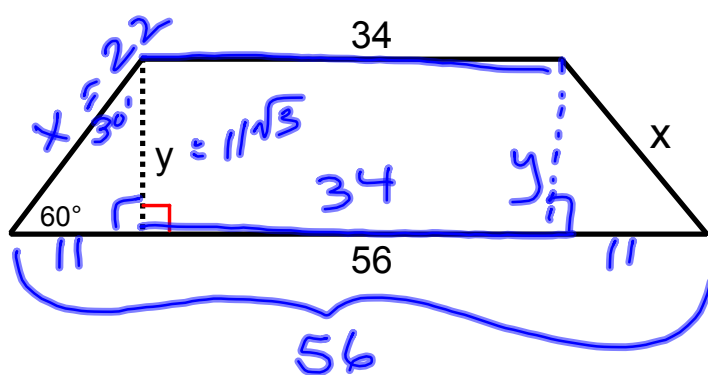
45-45-90



30-60-90



What is the value of x and y in the isosceles trapezoid below?



$$56 - 34 = 22$$

$$\frac{22}{2} = 11$$

