

## Math 8

Our Goal: To learn to use the Pythagorean Theorem

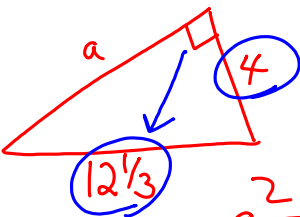
Warm Up: engage<sup>ny</sup> question

Today's homework

- Pythagorean Theorem worksheet
- 7.3 Practice handout

Previous homework

7.3 Exercises, p.304-305: 2-14 (evens)



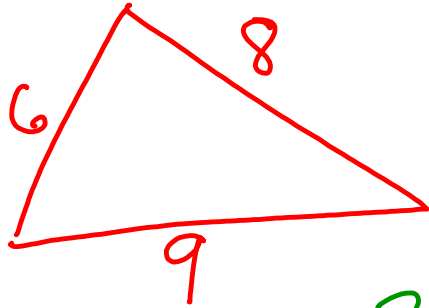
$$a^2 + b^2 = c^2$$

$$a^2 + 4^2 = (12\frac{1}{3})^2$$

$$a^2 + 16 = \left(\frac{37}{3}\right)^2$$

$$a^2 = \left(\frac{37}{3}\right)^2 - 16$$

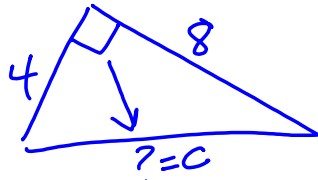
$$a = \sqrt{\left(\frac{37}{3}\right)^2 - 16}$$



$$6^2 + 8^2 \stackrel{?}{=} 9^2$$

$$36 + 64 = 81$$

NO



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

$$4^2 + 8^2 = c^2$$

$$16 + 64 = c^2$$

$$80 = c^2$$

$$\sqrt{80} = c$$