A little Review before we begin.

Solve

$X^2=144$

$X \cdot X = 144$ what times itself equals 144?

$12 \cdot 12 = 144$ So $X = 12$

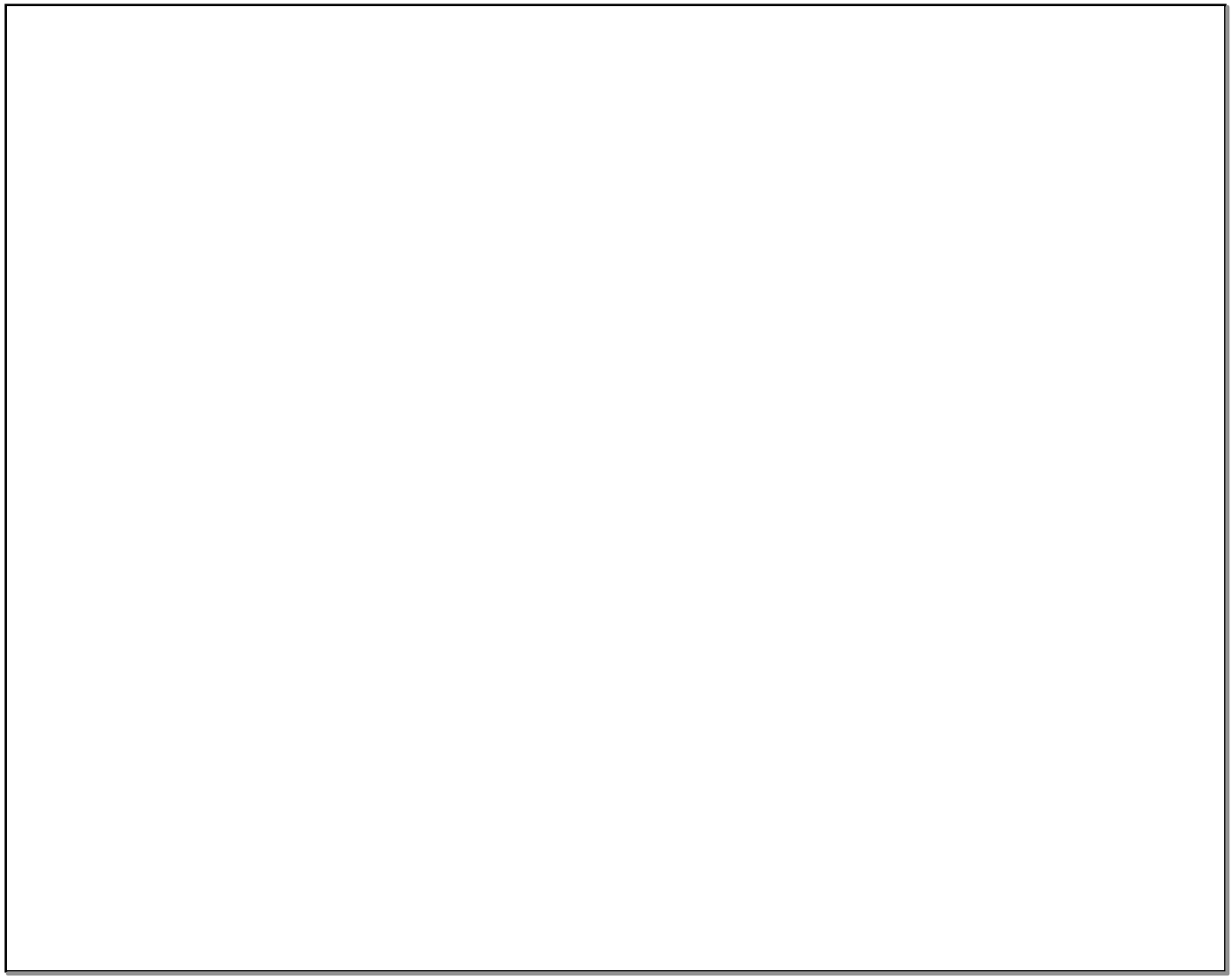
Not all answers will come out so nice however.
So another way to solve this is by using square roots.

$X^2 = 135$

$X \cdot X = 135$ Take the square root of both sides.

$\sqrt{X \cdot X} = \sqrt{135}$

$X = 11.618950038622$ → 11.62 units



Solve these

$\sqrt{4} = \sqrt{2 \cdot 2} = 2$

$x^2 = 81$

$x \cdot x = 81$

$9 \cdot 9 = 81$

$x = 9$

$x^2 = 169$

$13 \cdot 13 = 169$

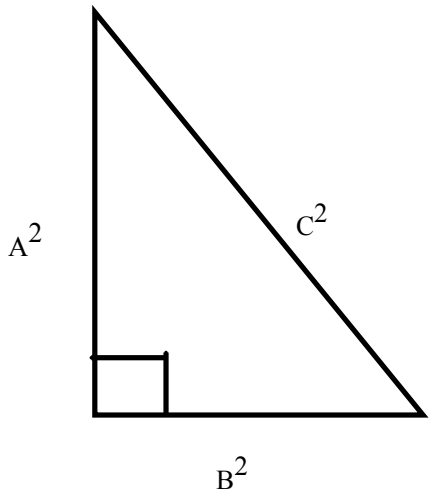
$x = 13$

$x^2 = 223$

$\sqrt{x \cdot x} = \sqrt{223}$

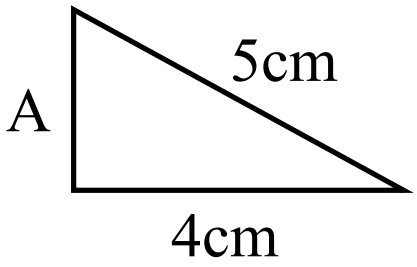
$x \approx 14.93\ldots$

Pythagorean theorem



$$A^2 + B^2 = C^2$$

Now for something a little more difficult. Solve for A.



$A^2 + 4^2 = 5^2$

$A^2 + 16 = 25$ (think of 25 - 16)

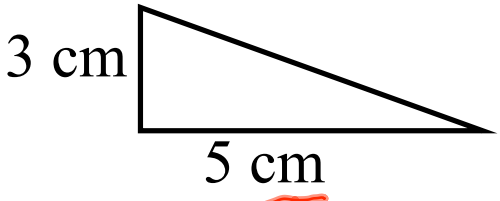
$9 + 16 = 25$

$A^2 = 9$ (Now solve for A. Like before.)

$A \cdot A = 9$ So...

$A = 3$

Now for some practice



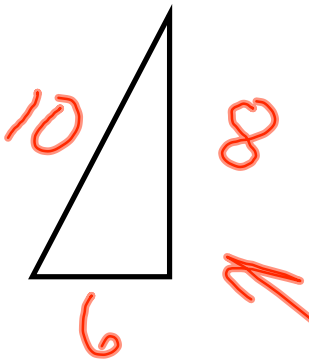
$3^2 + 5^2 = c^2$

$9 + 25 = c^2$

$\sqrt{34} = \sqrt{c^2}$

$5.831\text{cm} = c$

(A)



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

$64 + 36 = c^2$

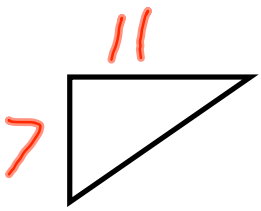
$100 = c^2$

$100 = c \cdot c$

$10 = c$

$\therefore$

⑩



$7^2 + 11^2 = c^2$

$49 + 121 = c^2$

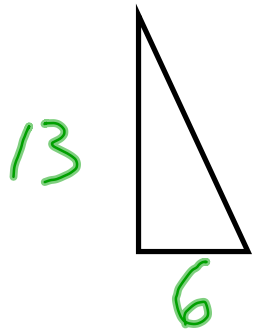
$170 = c^2$

on WS 'BAD-.

$170 = c \cdot c$

$13.038 = c$

$13.0 \cong c$



$13^2 + 6^2 = c^2$

$169 + 36 = c^2$

$205 = c^2$

$= c \cdot c$