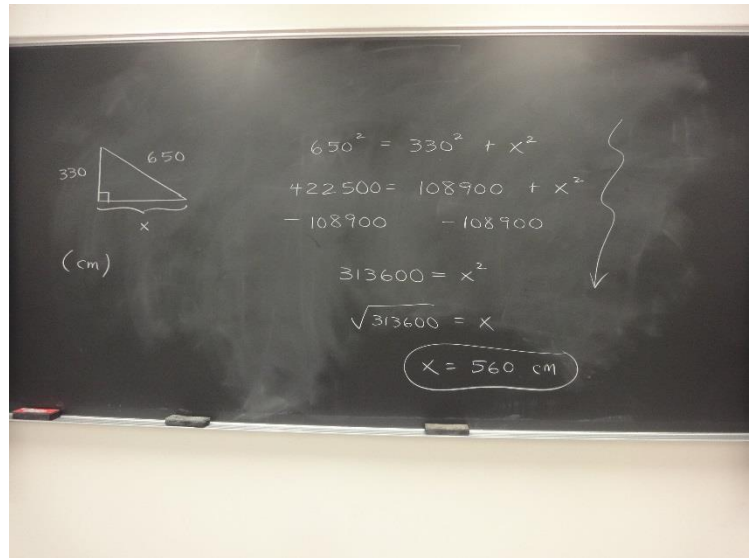
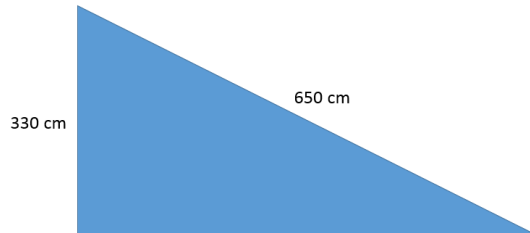


Work on using good notation!

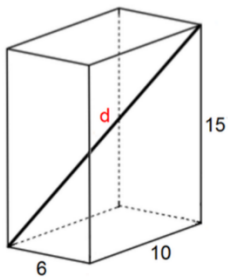
Problem (Level 0)

Find the length of the missing side:



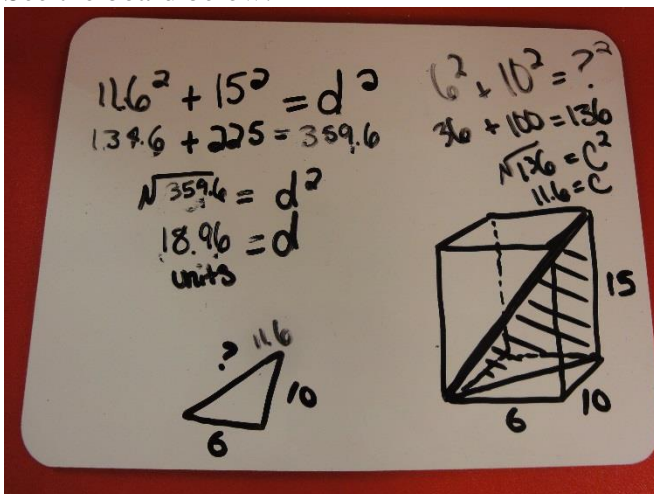
Problem Solving (Level I)

Find the length d pictured below.



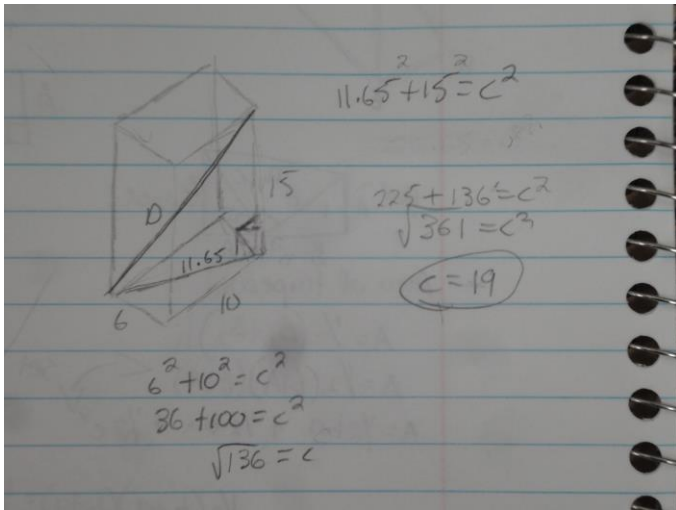
Source: Ollie Lovell

See the board below:



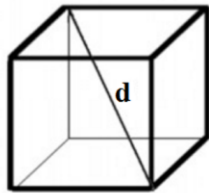
The work starts in the upper right of the board (finding the hypotenuse of the triangle with legs 6 and 10). The hypotenuse is around 11.66. Once you know this, the 11.66 is the base (one of the legs) of the shaded triangle (see the board). Use the Pythagorean Theorem again and you'll see $d = 19$.

Here's another solution:



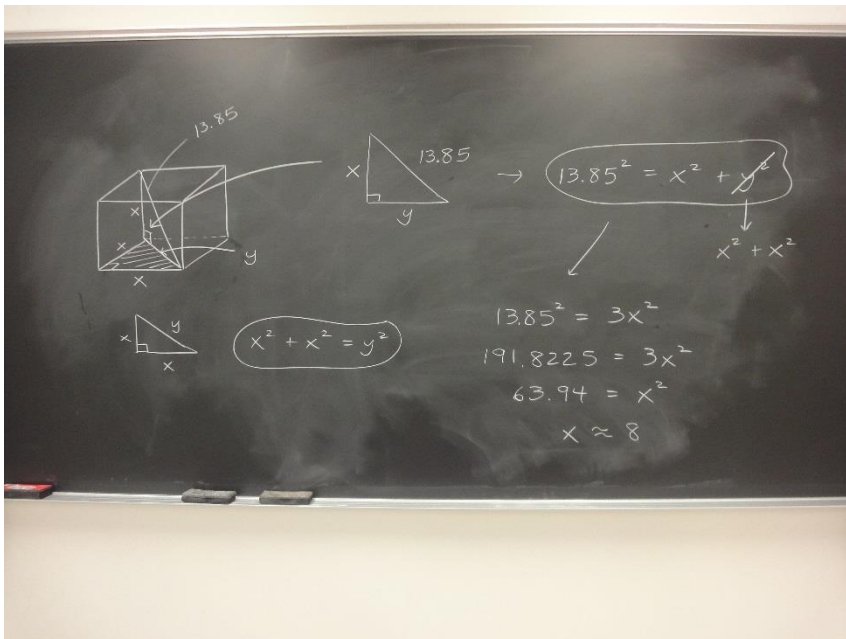
Problem Solving (Level II)

The cube below has a diagonal d of length 13.85 cm. What is the length of one of the sides of the cube?



Source: Ollie Lovell

See the work below:



Or this:

