Quiz 6

Part A: [2] True/False. Circle T if the statement is *always* true, otherwise circle F. No partial credit is given.

T F Given a triangle with sides of length a, b, and c, we know $a^2 + b^2 = c^2$.

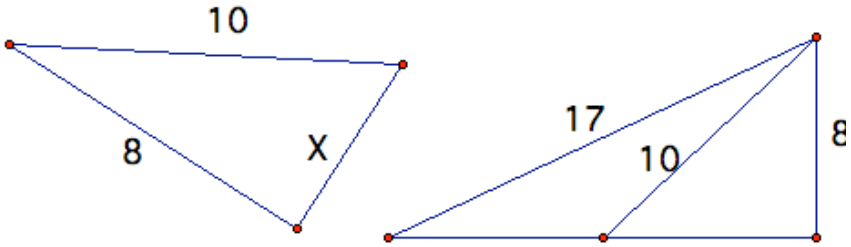
T F The area of a circle with radius r is πr^2.

T F There are 100 square centimeters in 1 square meter.

T F The area of a square is the base length times the height.

Part B: Show *all* your work on the following. A right answer with no supporting work will receive no credit.

1. [3] Find x in each of the following:



2. Assume ABC is similar to triangle DEF and

$$\frac{\text{AB}}{\text{DE}} = \frac{2}{3}$$

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(a) [1] What is the ratio of the heights of the triangles?

(b) [4] *Justify* your answer above.