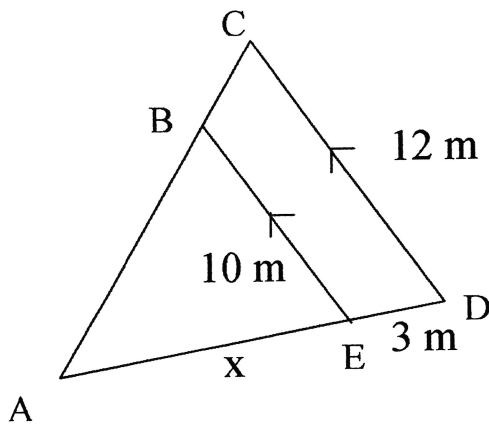


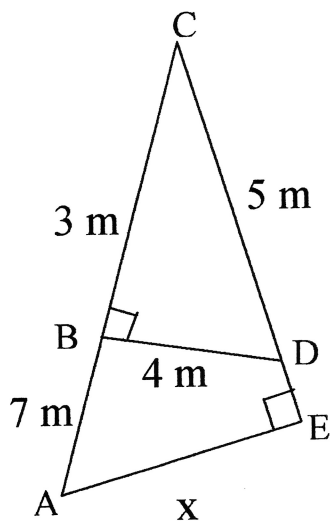
Practice: Similar Triangles and the Pythagorean Theorem

1. Determine the length of the side x (no proof required).

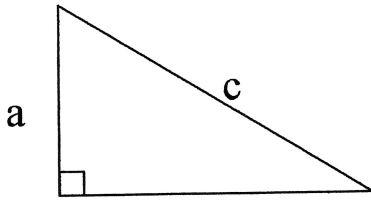


Given: $\triangle ABE \sim \triangle ACD$

2. Determine the length of the side x (include a proof).



Pythagorean Theorem

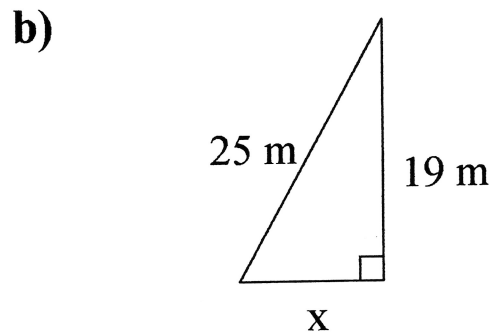
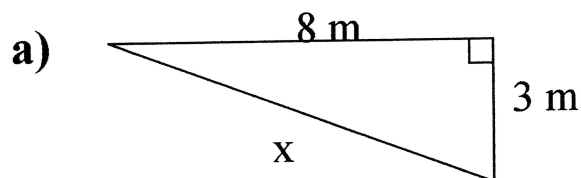


Recall: $a^2 + b^2 = c^2$ and

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

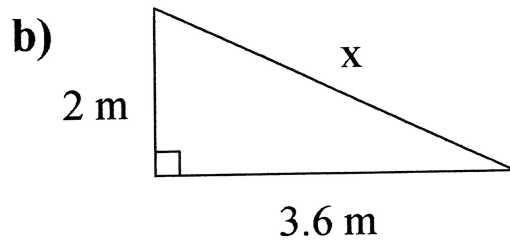
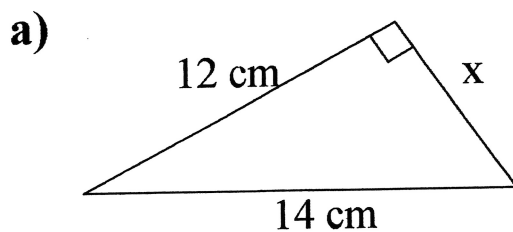
- where 'c' is the hypotenuse
- 'a' and 'b' are the smaller sides

1. Determine the length of the side x.



Homework:

Determine the length of the side x in the triangles below



Complete Questions 3b,d, 4, 6, 8, 10, 12 on SPUST sheet.