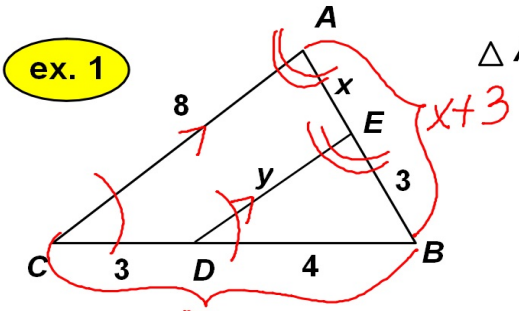
7 - 4 Similar Triangles

Std. 5.0

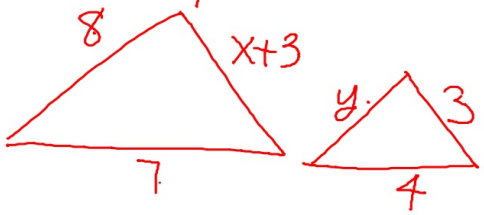
Jan 6

ex. 1



△ ABC ~ △ EBD find x and y

AA~



$\frac{4}{7} = \frac{3}{x+3}$

$4x + 12 = 21$

$4x = 9$

$x = \frac{9}{4}$

$2\frac{1}{4}$

2.25

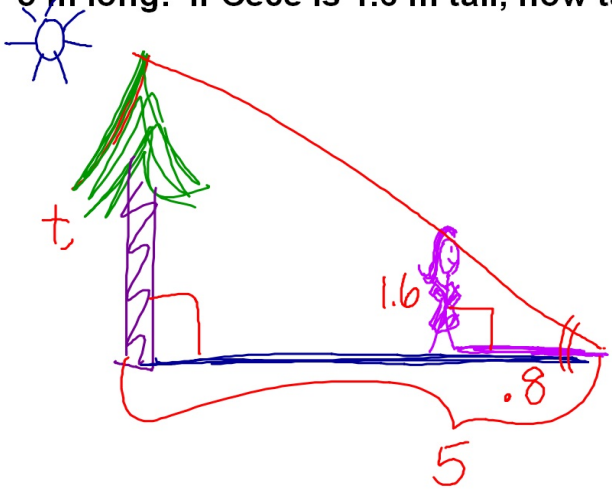
$\frac{4}{7} = \frac{y}{8}$

$7y = 32$

$y = \frac{32}{7}$

$4\frac{4}{7}$

ex. 2 Cece is standing in line with the shadow of a tree. Her shadow is 0.8 m long and the tree's shadow is 5 m long. If Cece is 1.6 m tall, how tall is the tree?



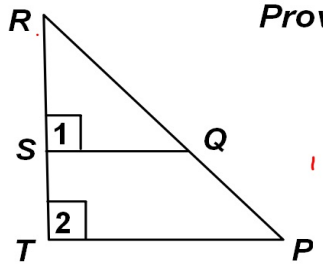
$\frac{1.6}{t} = \frac{.8}{5}$

$.8t = 8.0$

$8t = 80$

$t = 10$ m

ex. 3



Given: $\angle 1$ and $\angle 2$ are right angles

Prove: $\Delta RSQ \sim \Delta RTP$ and $\frac{RS}{RT} = \frac{SQ}{TP}$