## Section 4-1: Related Rates Intro

Set up: A right triangle has a base that is getting longer at a rate of $5 \mathrm{~m} / \mathrm{s}$ and a height that is getting shorter at a rate of $2 \mathrm{~m} / \mathrm{s}$.

Question 1: How fast is the length of hypotenuse changing when the base is 10 m and the height is 40 m ?

Question 2: How fast is the area of the triangle changing when the base is 10 m and the height is 40 m ?

