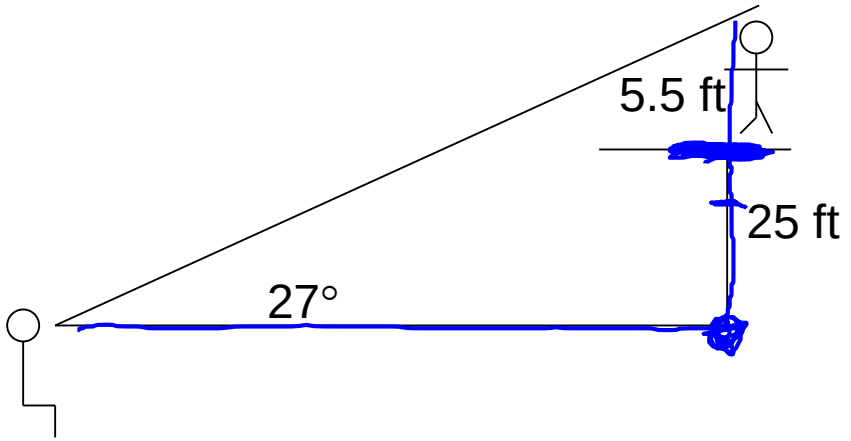
Thursday, April 25, 2019

- Warm-up
  - At the circus, a person in the audience at ground level watches the high-wire routine. A 5-foot-6-inches tall acrobat is standing on a platform that is 25 feet off the ground. How far is the audience member from the base of the platform, if the angle of elevation from the audience member's line of sight to the top of the acrobat is 27°



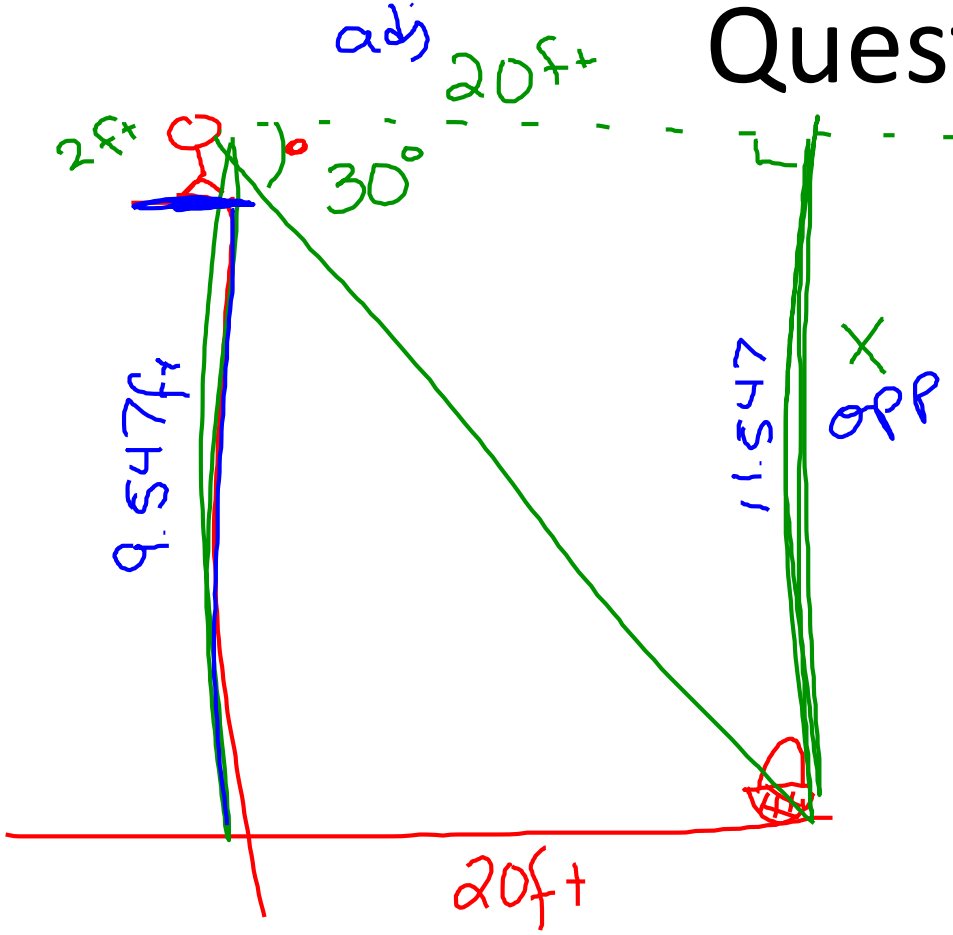
- Questions
- Test

Objectives

- Content Objective: I will solve for missing sides of triangles in application using right triangle trigonometry, Pythagorean theorem and the law of sines and the law of cosines.
- Social Objective: I will use time wisely and not distract others.
- Language Objective: I will read problems carefully for details and draw pictures that follow those descriptions.

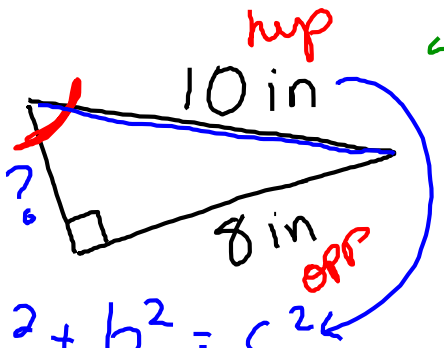
angle of depression to basket 30°

Questions



$20 \cdot \tan(30) = \frac{X}{20}$ ~~20~~

$11.547 = X$



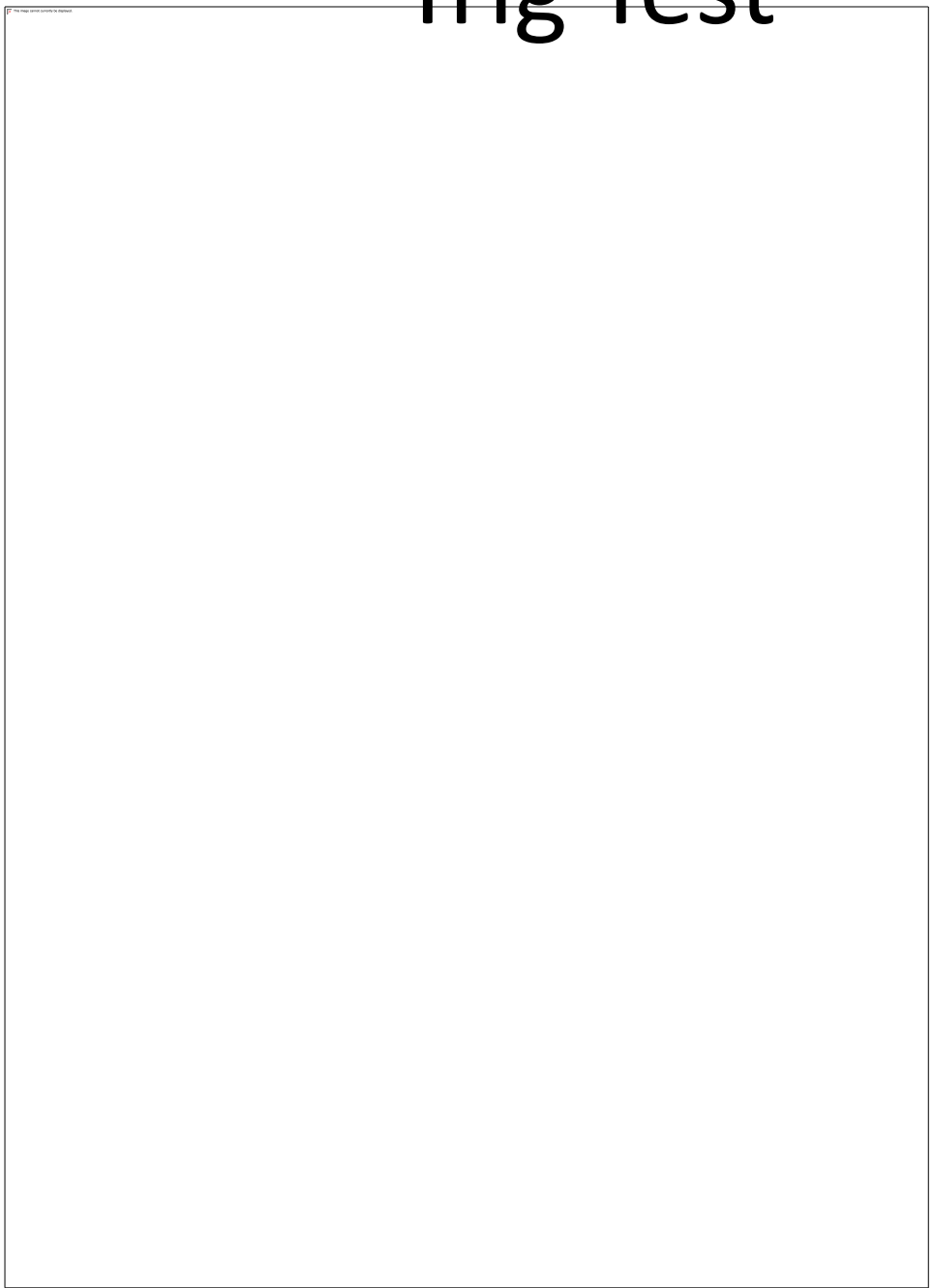
$a^2 + b^2 = c^2$

$a^2 + 8^2 = 10^2$

$\sin^{-1}(\sin X) = \sin^{-1}\left(\frac{8}{10}\right)$

$X = 53.130°$

Trig Test



An addition to MC #6

A forest ranger is **67 meters above the ground** in an observation tower when she sights a forest fire due east of the tower. The **angle of depression** to the closest edge of the fire is **18º**