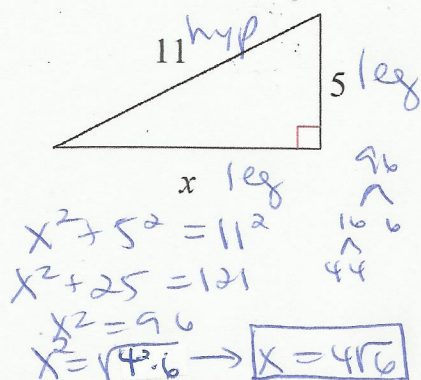


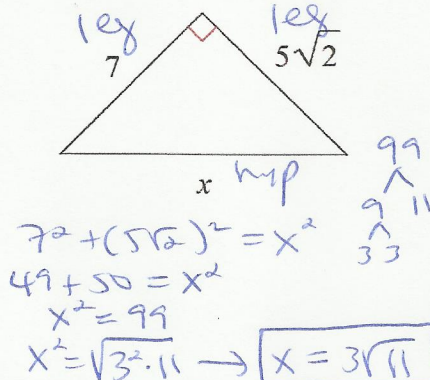
Directions: Complete each problem (and its parts). Must show appropriate work for credit!

For problems 1 – 3: Use the Pythagorean Theorem to complete each problem below.

1.) Find side x (in radical form).



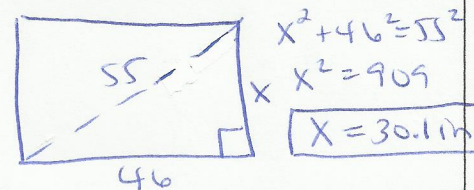
2.) Find side x (in radical form)



3.) Complete word problem.

Round to nearest tenth.

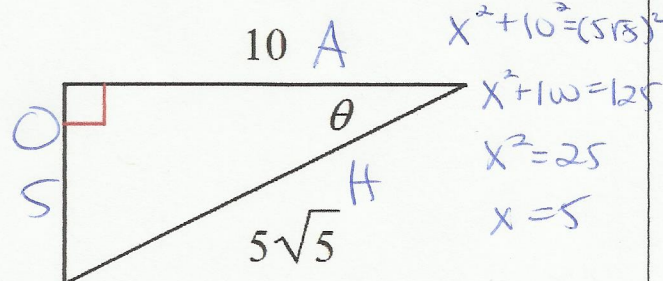
A television is labeled at 55 inches (which represents diagonal length). The width of the television is 46 in. What is the height of the television?



4.) Find the THREE BASIC trigonometric ratios for θ .

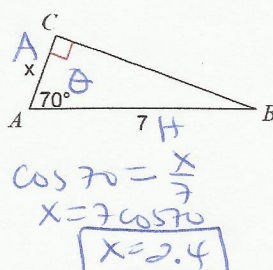
Keep in simplified radical / fractional form.

$\sin \theta = \frac{5}{5\sqrt{5}} \cdot \frac{\sqrt{5}}{\sqrt{5}} = \frac{5\sqrt{5}}{25} = \frac{\sqrt{5}}{5}$
$\cos \theta = \frac{10}{5\sqrt{5}} \cdot \frac{\sqrt{5}}{\sqrt{5}} = \frac{10\sqrt{5}}{25} = \frac{2\sqrt{5}}{5}$
$\tan \theta = \frac{5}{10} = \frac{1}{2}$

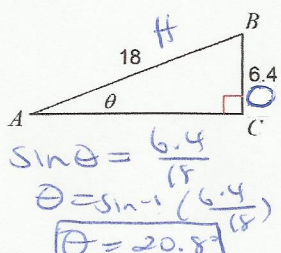


For problems 5 – 8: Find the value of side x or angle θ . Round to nearest tenth.

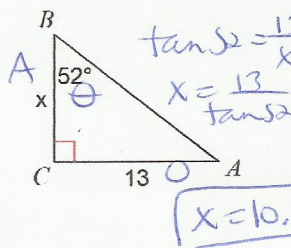
5.) $x = 2.4$



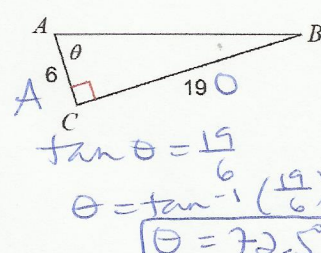
6.) $\theta = 20.8^\circ$



7.) $x = 10.2$

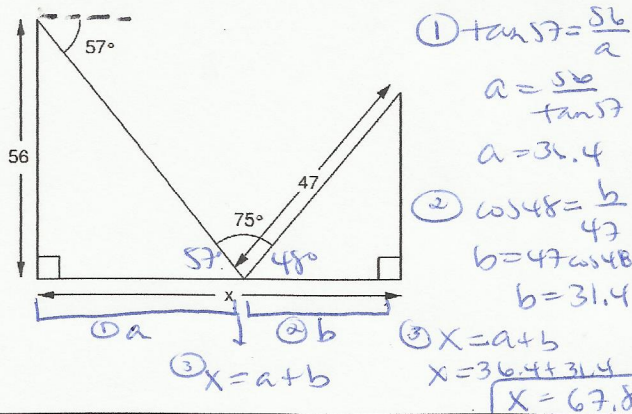


8.) $\theta = 72.5^\circ$



For problems 9 – 10: Complete each critical thinking problem by finding side x or angle θ .

9.) Find the length of x. Round to tenth.



10.) Find the measure of angle θ . Round to tenth.

