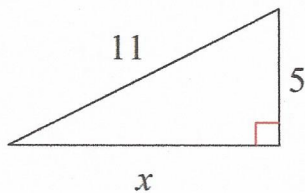


Directions: Complete each problem (and its parts). Must show appropriate work for credit!

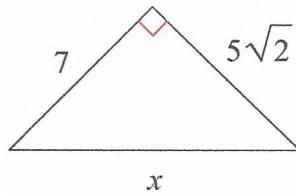
For problems 1 – 3: Use the Pythagorean Theorem to complete each problem below.

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



$$X = 4\sqrt{6}$$

2.) Find side x (in radical form)



$$X = 3\sqrt{11}$$

3.) Complete word problem.

Round to nearest tenth.

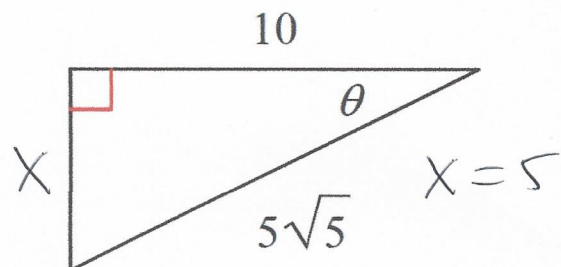
A television is labeled at 55 inches (which represents diagonal length). The width of the television is 46 in. What is the height of the television?

$$30.1 \text{ in}$$

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

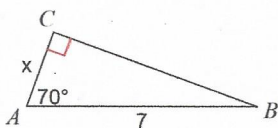
Keep in simplified radical / fractional form.

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

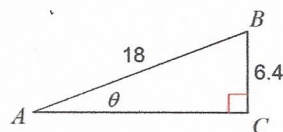


For problems 5 – 8: Find the value of side x or angle θ . Round to nearest tenth.

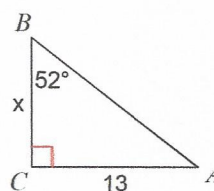
5.) $x = 2.4$



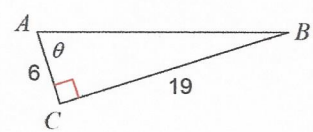
6.) $\theta = 20.8^\circ$



7.) $x = 10.2$

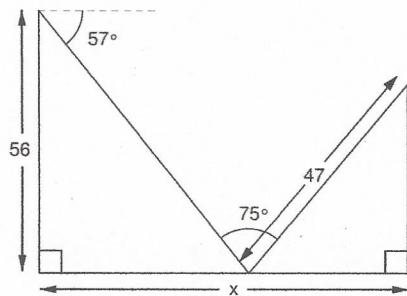


8.) $\theta = 72.5^\circ$



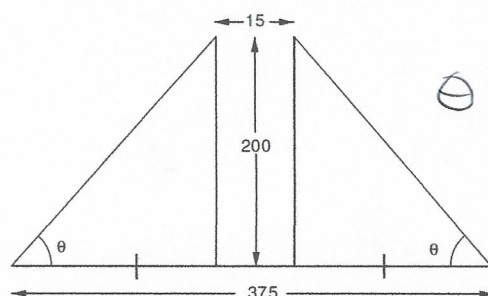
For problems 9 – 10: Complete each critical thinking problem by finding side x or angle θ .

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



$$X = 67.8$$

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



$$\theta = 48^\circ$$