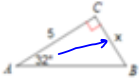



Find the measure of each side indicated. Round to the nearest tenth.

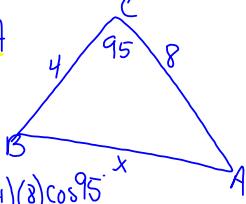
2)  $\tan 32 = \frac{x}{5}$
 $x = 5 \tan 32 = 3.1$

Find the measure of each angle indicated. Round to the nearest tenth.

3)  $\tan^{-1}(12/7)$
 $A = 59.7^\circ$

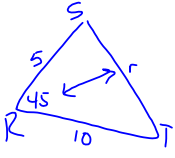
5.4 Law of Cosines

$a^2 = b^2 + c^2 - 2bc \cos A$



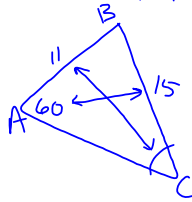
$x^2 = 4^2 + 8^2 - 2(4)(8)\cos 95^\circ$
 $x = 9.3$

$\triangle RST$ $t = 5$ $s = 10$ $m\angle R = 45^\circ$
 Find r .

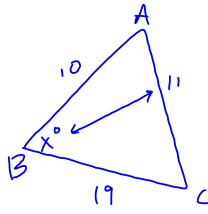


$r^2 = 5^2 + 10^2 - 2 \cdot 5 \cdot 10 \cos 45$
 $r = 7.4$

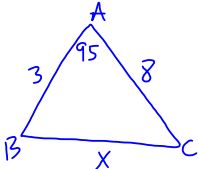
$\triangle ABC$ $m\angle A = 60^\circ$ $c = 11$ ft. $a = 15$ ft.
 Find $m\angle C$



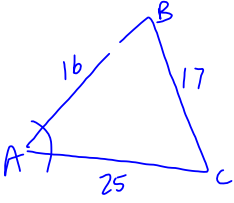
$\frac{\sin C}{11} = \frac{\sin 60}{15}$
 $\sin C = \frac{11 \sin 60}{15}$
 $C = 39.4^\circ$



$11^2 = 10^2 + 19^2 - 2 \cdot 10 \cdot 19 \cos X$
 $121 = 100 + 361 - 380 \cos X$
 $-340 = -380 \cos X$
 $.894 \dots = \cos X$
 $X = 26.5^\circ$



$x^2 = 3^2 + 8^2 - 2 \cdot 3 \cdot 8 \cos 95$
 $x = 8.8$



$$17^2 = 16^2 + 25^2 - 2 \cdot 16 \cdot 25 \cos A$$
$$\frac{(17^2 - 16^2 - 25^2)}{(-2 \cdot 16 \cdot 25)} = -2 \cdot 16 \cdot 25 \cos A$$
$$\cos^{-1}(.74) \rightarrow .74 = \cos A$$
$$\rightarrow A = 42.3$$