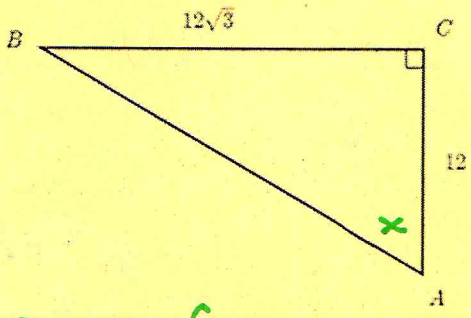
4

What is the measure in degrees of $\angle BAC$ in the figure shown at left?



Answer:

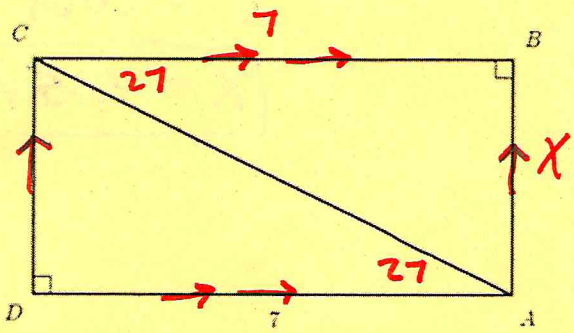
$\triangle BAC$ is a 30-60-90 $\triangle$

↑

$\lambda = \sqrt{3}s$

$\boxed{\angle BAC = 60°}$ across from the long leg

It is given that $\sin(27^\circ) \approx 0.45$, $\cos(27^\circ) \approx 0.89$, and $\tan(27^\circ) \approx 0.51$. In the figure at left, $\angle CDA$ and $\angle CBA$ are right angles, $\overline{CD}$ is parallel to $\overline{AB}$, and $\overline{CB}$ is parallel to $\overline{DA}$. Given that the length of $\overline{AD}$ is 7 and the measure of $\angle DAC$ is 27°, which of the following is closest to the length of $\overline{AB}$?



(A) 3.18

(B) 3.57

(C) 7.86

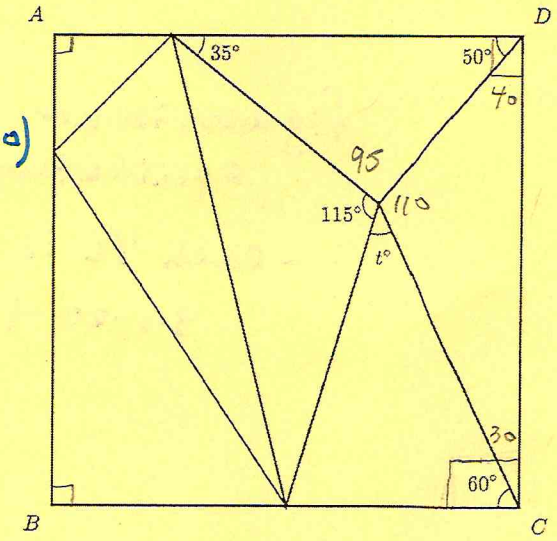
(D) 13.71

$\tan = \frac{\text{opp.}}{\text{adj}}$

$\tan 27 = \frac{x}{7} = 0.51$

$x = 3.57$

ABCD is a square. Find t in degrees.



(A) 30°

(B) 40°

(C) 50°

(D) 60°

(E) I would be guessing.

$t = 360 - (115 + 95 + 110)$

$t = 40$