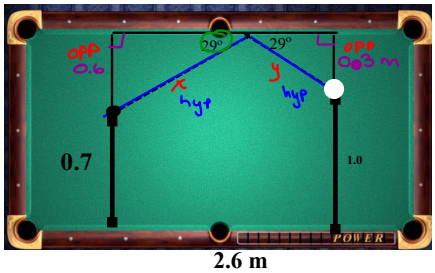
A pool table is 1.3 m wide and 2.6 m long. A white ball is shot to rebound and hit the black ball. The angle at which the ball hits the side is the same as the rebound angle. The positions of the balls are shown on the diagram below. Use trigonometric ratios to find the distance the white ball traveled by the time it hit the black ball.



1.3 m

2.6 m

x

$\sin\theta = \frac{o}{h}$

$\sin 29° = \frac{0.6}{x}$

$x = \frac{0.6}{\sin 29°}$

$x = \frac{0.6}{0.4848}$

$x = 1.24\text{m}$

y

$\sin\theta = \frac{o}{h}$

$\sin 29° = \frac{0.3}{y}$

$y = \frac{0.3}{\sin 29°}$

$y = \frac{0.3}{0.4848}$

$y = 0.62\text{m}$

$+$

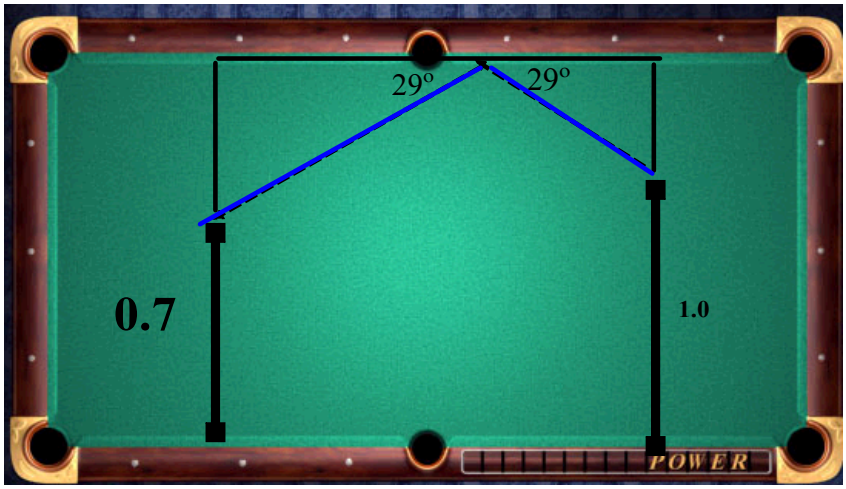
1.86m

Feb 25-6:05 PM

Test Review

Nov 20-10:50 AM

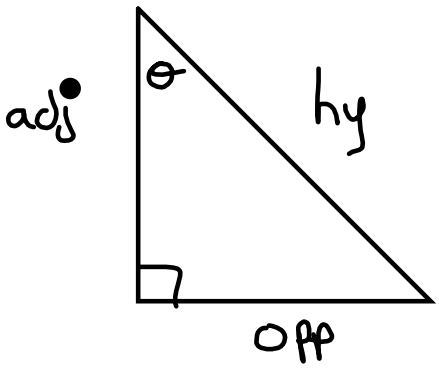
A pool table is 1.3 m wide and 2.6 m long. A white ball is shot to rebound and hit the black ball. The angle at which the ball hits the side is the same as the rebound angle. The positions of the balls are shown on the diagram below. Use trigonometric ratios to find the distance the white ball traveled by the time it hit the black ball.



1.3 m

2.6 m

Feb 25-6:05 PM



$\sin\theta = \frac{o}{h}$ $\cos\theta = \frac{a}{h}$ $\tan\theta = \frac{o}{a}$

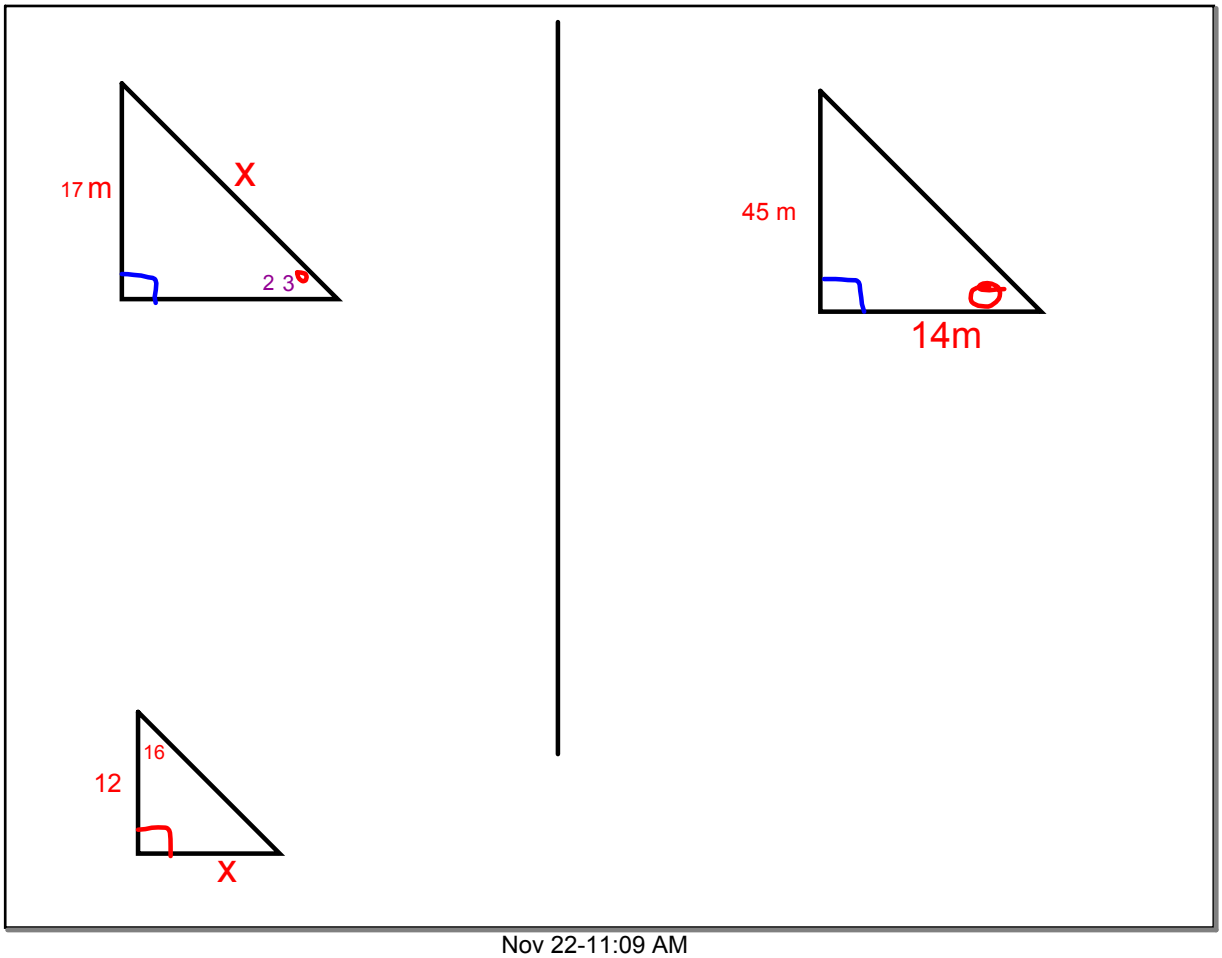
Nov 22-11:05 AM

$\tan 53^\circ = \frac{\quad}{\quad}$

$\tan \theta = 0.45$

Nov 22-11:07 AM

Nov 20-8:31 AM



Nov 22-11:09 AM