

1. On a coordinate grid a mouse walks from (2,5) to (3,8). It then walks all the way to (6,1). What is the total distance the mouse walked to the nearest tenth.

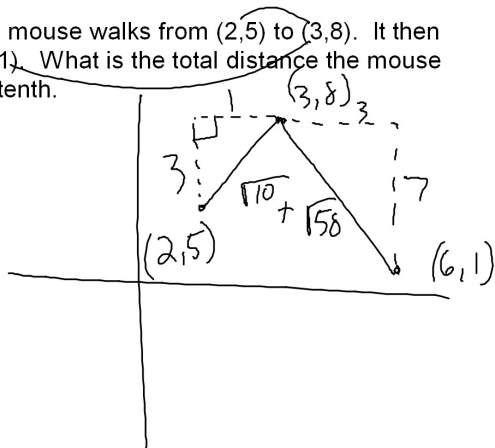
A. 2.3

B. 5.7

C. 9.2

D. 10.8

E. 18.2



2. I walk north for 7 meters. Then I turn South-East at an angle of 60° from my original direction and walk until I'm directly East from where I started, creating a right triangle. How far am I from my starting point.

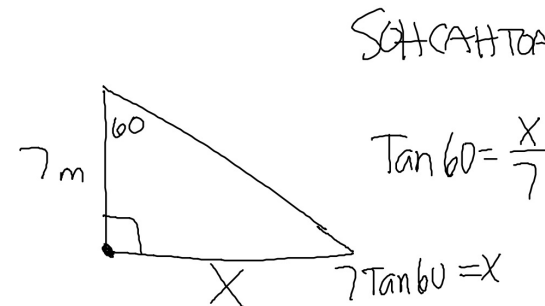
A. $7\sin 60^\circ$

B. $\sin 60^\circ / 7$

C. $7\tan 60^\circ$

D. $\tan 60^\circ / 7$

E. $\cos 60^\circ / 7$



3. Find the largest area of the following shapes.

A. Square with side 3.5

$$(3.5)^2 = 12.25$$

B. Rectangle with dimensions 6 and 2.5

$$(6)(2.5) = 15$$

C. Circle with radius 2.6

$$\pi(2.6)^2$$

D. Semicircle with radius 3

E. Triangle with base of 5 and altitude of 3.2

4. In the standard (x,y) coordinate plane, the graph of $(x+3)^2 + (y+5)^2 = 16$ is a circle. What is the circumference of the circle?

A. 4π

B. 5π

C. 3π

D. 8π

E. 25π

$$C = 2\pi r$$

$$C = \pi d$$

Circle w/
center at
(0,0)

$$x^2 + y^2 = r^2$$

$$r^2 = 16$$

$$r = 4$$