

Graph each vector-valued function. At each specified point, plot the tangent vector and find the speed at that point.

1. $f(t) = (\cos(2\pi t), \sin(2\pi t))$ at $t = \frac{1}{4}$, $t = \frac{1}{2}$

2. $f(t) = (\cos(t), -\sin(t))$ at $t = \frac{\pi}{4}$, $t = \frac{\pi}{2}$, $t = \frac{3\pi}{2}$

Now find the speed *function* for each.