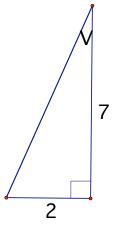
## Quiz 5

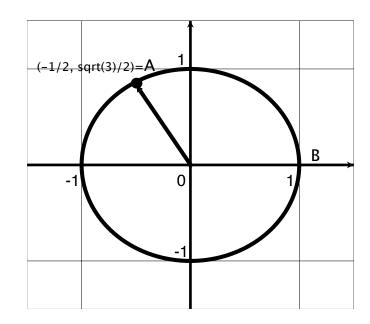
Show all your work algebraically for each. No credit is given without supporting work. There are two sides to this quiz.

1. [3] (§5.5 #11) Find  $\sin v$ , given:



- 2. The following questions refer to the angle depicted on the left between A, O, and B.
  - (a) [1] Find the radian measure of the angle AOB.

(b) [1] Find the degree measure of the angle AOB.



(c) [1] ( $\S 5.1 \# 21$ ) Find the length of the arc connecting A to B that passes through quadrant I.

- 3. Given  $\cos 15^{\circ} = \frac{\sqrt{2+\sqrt{3}}}{2}$ , find the following:
  - (a) [3] (§5.4 #13) Find the exact simplified value (not a decimal approximation) of  $\sin 15^{\circ}$

(b) [1] (§5.4 #15) Find the exact simplified value (not a decimal approximation) of  $\tan 15^\circ$