1. (5 pts) Consider runway 12/30 at Honolulu International Airport. A wind of 18 knots is blowing off of the Pacific Ocean from 150 degrees. What is the cross-wind for the runway? Please show your work for full credit.

\[
\sin 30 = \frac{\text{crosswind}}{18}
\]

\[18 \cdot \sin 30 = \text{crosswind}\]

9 knots = crosswind

2. (5 pts) Consider the blank windrose below. Draw runway 12/30. Draw a 10 knot crosswind tolerance rectangle for it (assume 60 knot tail/head wind tolerance). Draw the wind vector from problem 1. Does the wind vector from problem 1 lie entirely within this rectangle?

Yes
('crosswind < 10')