Vector Addition
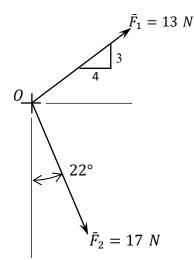
1. For vectors $\bar{F}_1$ and $\bar{F}_2$, determine the magnitude of the resultant $\bar{R} = \bar{F}_1 + \bar{F}_2$.

$\bar{F}_1 = 13\ N$

3

4

0

22°

$\bar{F}_2 = 17\ N$

   A. 17.2 N   B. 18.6 N

   C. 19.2 N   D. 17.9 N

2. For vectors $\bar{F}_1$ and $\bar{F}_2$, determine the magnitude of the angle between the resultant $\bar{R} = \bar{F}_1 + \bar{F}_2$ and the horizontal reference line.

   A. 25.4^o B. 27.2^o

   C. 24.1^o D. 22.6^o