AP Calculus AB Name_____
Opener 5.6
Calculator OK!

Round correctly to 3 decimal places when necessary. Make sure you are also including units.

1. An airplane is flying with an air speed of 275 miles per hour. If it is climbing at an angle of 18 degrees, find the rate at which it is gaining altitude.

2. A conical tank, with its vertex down, is 16 feet across the top and 12 feet deep. If water is flowing into the tank at a rate of 10 cubic feet per minute, find the rate of change of the depth of water when the water is 8 feet deep.