Grade Resistance

Formula: $F=W\sin\theta$

To get the correct answer on your calculator do one of the following.

- After putting in your equation clip 2nd APPS and click the degree symbol to but on the degree for sin
- Before beginning, click the mode button on your calculator and change the setting from radian to degree.

1. A Truck weighing 2400lbs is traveling uphill. The road has a slope of 20°. Find both the parallel and perpendicular weight acting to the slope. Show all your steps

2. A car weighing 1500lbs is going downhill at 15°. Find both the parallel and perpendicular weight acting to the slope. Show all your steps

3. The car weighing 950lbs is going downhill at 3.43°. Find both the parallel and perpendicular weight acting to the slope. Show all your steps.

4. There is a truck weighing 4500lbs going uphill at a slope of 5.78°. Find both the parallel and perpendicular weight acting to the slope. Show all your steps.

5. A Right triangle <DEF has angle D= 47°, side f= 17.86cm. What is the length of side d.

6. A right Triangle <ABC has angle A= 65°, side c= 26.53inch. Find all other sides and angles of the Triangle.