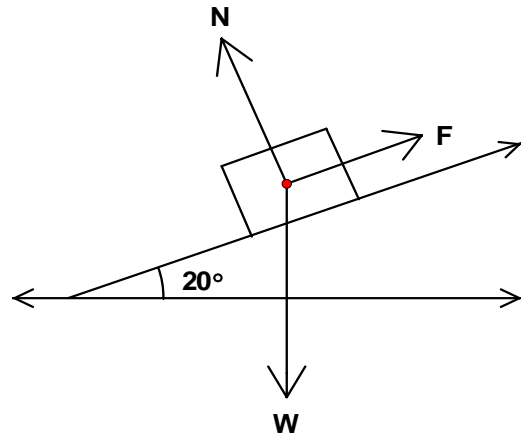


Name _____ Date _____

Ch 2.4 & 2.5 Review 2

1) A force of 142 lbs. is exerted at an angle of 48° . Find $|\vec{V}_x|$ and $|\vec{V}_y|$.

2) A box that weighs 75 lb. is at rest on an incline of 20° . Find the magnitude of \vec{N} and \vec{F} .



3) A car is pushed along a street with a force downward of 75 lbs. at an angle of 25° . How much work is done if the car is pushed 85 ft?

4) A ship leaves San Francisco and travels 400 miles with a bearing of $S18^\circ W$. Then it turns and travels 600 miles with a bearing of $S78^\circ W$. How far west and how far south is the ship from SF?

5) An antenna has 2 guy wires attached at a height of 54 Ft. The wires are anchored to the ground on opposite sides of the antenna. If the angle with the ground for one wire is 38° and the other 52° , how far apart are the wire anchored?

1) $|\vec{V}_x| = 95$
 $|\vec{V}_y| = 105.5$

2) $|\vec{N}| = 70.5 \text{ lbs.}$
 $|\vec{F}| = 25.7 \text{ lbs.}$

3) 5778 ft.-lbs.

4) 505 mi. south
710.5 mi. west

5) 111 ft.