Name: _____ **Period:** _____ **Date:** _____

Work Practice Problems Worksheet #1

1) Amy uses 20N of force to push a lawn mower 10 meters. How much work does she do?

2) How much work does an elephant do while moving a circus wagon 20 meters with a pulling force of 200N?

3) A 900N mountain climber scales a 100m cliff. How much work is done by the mountain climber?

4) Shawn uses 45N of force to stop the cart 1 meter from running his foot over. How much work does he do?

5) How much work is done when a force of 33N pulls a wagon 13 meters?

6) How much work is required to pull a sled 5 meters if you use 60N of force?

7) Tommy does 15 Joules of work to push the pencil over 1 meter. How much force did he use?

8) Angela uses a force of 25 Newtons to lift her grocery bag while doing 50 Joules of work. How far did she lift the grocery bags?

9) The baseball player does 1234 Joules of work when hitting a baseball into left field. Assuming the baseball landed 100 meters away from home plate, how much force did the player use to hit the ball?

Work Practice Problems Worksheet #1 ANSWER KEY

1) Amy uses 20N of force to push a lawn mower 10 meters. How much work does she do?

Work = Force X Distance
Work = 20N X 10m
Work = 200 J

2) How much work does an elephant do while moving a circus wagon 20 meters with a pulling force of 200N?

Work = Force X Distance
Work = 200N X 20m
Work = 4000 J

3) A 900N mountain climber scales a 100m cliff. How much work is done by the mountain climber?

Work = Force X Distance
Work = 900N X 100m
Work = 90,000 J

4) Shawn uses 45N of force to stop the cart 1 meter from running his foot over. How much work does he do?

Work = Force X Distance
Work = 45N X 1m
Work = 45 J

5) How much work is done when a force of 33N pulls a wagon 13 meters?

Work = Force X Distance
Work = 33N X 13m
Work = 429 J

6) How much work is required to pull a sled 5 meters if you use 60N of force?

Work = Force X Distance
Work = 60N X 5m
Work = 300 J

7) Tommy does 15 Joules of work to push the pencil over 1 meter. How much force did he use?

Force = Work / Distance
Force = 15 J / 1 m
Force = 15 N

8) Angela uses a force of 25 Newtons to lift her grocery bag while doing 50 Joules of work. How far did she lift the grocery bags?

Distance = Work / Force
Distance = 50 J / 25 N
Distance = 2 m

9) The baseball player does 1234 Joules of work when hitting a baseball into left field. Assuming the baseball landed 100 meters away from home plate, how much force did the player use to hit the ball?

Force = Work / Distance
Force = 1234 J / 100 m
Force = 12.34 N