Name _____ Date _____

Transportation and Horse Power – Math

James Watt calculated the formula for horse power. He determined this formula by watching the difference in how horses could pull things heavy or light, and fast or slow.

1. Mark's horse could pull a cart with 500 pounds of flour from the store to his house without any problem. When Mark loaded the cart with 750 pounds of flour, the horse could only make it ½ of the way to Mark's house from the store. If Mark lived 13 miles from the store, how far could the horse go with 750 pounds of flour?

2. A stagecoach needed to go from Amarillo to Canyon in 45 minutes. If the stagecoach could make it from Amarillo to Canyon in 3 hours with 2 horses, how many horses would it need to make it in the 45 minute time limit?

3. Horses helped build the railroad by carrying lumber across the land to build the tracks. If a team of horses had to pull 1000 pounds of lumber over 20 miles and made the trip in one day, how long would it take them to pull 500 pounds of lumber the next day going on the same route?