

Bellwork Monday, March 31, 2014

1. Suppose it takes you 7.2 hours to fly into a headwind about 1440 miles between two cities. The return trip takes only 6 hours because you are flying with a tailwind.

Write and solve a system of equations to find the speed of the wind and the speed of the plane if there were no wind.

p = speed of the plane

w = speed of the wind

2. You run a painting business. To start the business you need to buy a truck and equipment which costs you \$21,000. Each job costs you an average of \$220 in materials. You pay your employees an average of \$350 on each job. You charge an average of \$900 per job. Find the break-even point.