MATH 1030, Unit Conversion Worksheet   Fall 2019

Name:

1. **Identify the units in the following problems**

   (a) Your average speed on a long walk, found by dividing distance traveled in miles by time elapsed in hours.

   (b) The unit price of oranges, found by dividing the price in dollars by the weight in pounds.

   (c) The cost of a piece of carpet, found by dividing its price in dollars by its area in square yards.

   (d) The flow rate of a river in which 5000 cubic feet of water flow past a particular location every second.

2. **Do the following conversions.**

   (a) Convert 100 km per hour to MPH

   (b) Convert 32 years to days (neglecting leap years).

(c) Convert the Space Station's orbital speed of 17,200 miles per hour to units of miles per second.

3. A new sidewalk will be 4 feet wide, 200 feet long, and filled to a depth of 6 inches (0.5 foot) with concrete. How many cubic yards of concrete are needed?

4. What is the total weight of 23 baseballs that weigh 5.25 ounces each?