Bell Ringer - Find the unit rate. A truck driver drove 350 miles in 8 3/4 hours. What is the speed in mph? SHOW WORK

$350 \div 8\frac{3}{4}$ $\frac{35}{4}$

$\frac{\cancel{350}^{10}}{1} \cdot \frac{4}{\cancel{35}_{1}} = 40 \text{mph}$

# Conversion Rates Examples - Day 2

1. Nick Pineau ran the 40 meter dash in 8.71 seconds. What is this rate in miles per hour?

$$\frac{40\,m}{8.71\,sec} \cdot \frac{60\,sec}{1\,min} \cdot \frac{60\,min}{1\,hr} \cdot \frac{3.28\,ft}{1\,m} \cdot \frac{1\,mi}{5280\,ft}$$

$$\frac{472176\,mi}{4598.8\,hr} = 10.3\,mph$$

2. Usain Bolt holds the 100 meter dash record with a time of 9.58 seconds. What is this rate in miles per hour?

$$\frac{100\text{m}}{9.58\text{sec}} \cdot \frac{60\text{sec}}{1\text{min}} \cdot \frac{60\text{min}}{1\text{hr}} \cdot \frac{1\text{km}}{1000\text{m}} \cdot \frac{.621\text{mi}}{1\text{km}} =$$

$$\frac{223560}{9580} = 23.3\ \text{mph}$$