



Kinematics
Across the Ocean

$$1 \text{ mile} = 1.609 \text{ km}$$
$$1 \text{ km} = 1000 \text{ m}$$



Name SOLUTIONS

Date _____

You are talking to your friend from Paris, France. Your friend is telling you a great story about a road trip they took. They were driving on the Autobahn highway in Germany. They tell you they were driving at 237 km/hour {kilometers/hour}. In mph, how fast was your friend driving? How fast were they travelling in m/s {meters/second}? Show your work.

$$\frac{237 \text{ km}}{\text{hour}} \times \frac{1 \text{ mile}}{1.609 \text{ km}} = \boxed{147 \text{ miles/hour}}$$

$$\frac{237 \text{ km}}{\text{hour}} \times \frac{1000 \text{ m}}{\text{km}} \times \frac{1 \text{ hour}}{3600 \text{ s}} = \boxed{65.8 \text{ m/s}}$$

How are units important in the "real-world?" How have units been important in our class? Use at least ⁽²⁾ sentences for your answer.