Converting Practice

Name: _____

Date: _____

Hour: _____

For problems 1-2, please use dimensional analysis and these conversion factors:

pallet = 45 bundles   1 bundle = 32 cases   1 case = 12 cans   1 can = 218.4 mL

1. How many mL of apple juice does the company need to make to fulfill an order for 2.5 pallets?

   9,434,880 mL

2. If 46,680 mL of juice are produced, how many cases of juice can be made?

   17.8 cases

3. Please perform the following conversions.

   a) 15.60 cm = _____0.156_____ m   b) 41.0 kg = ___41,000,000,000_____ µg

4. A speed limit sign in Indiana reads 60 miles per hour. Convert these units to meters per second. (note: 1 mile = 1.61 km)

   26.8 m/s

5. Convert the following speeds:

   a) 25 m/s = _____90_____ km/h   b) 24.3 m/s = ____8,748,000_____ cm/h

   c) 45 km/h = _____12.5_____ m/s   d) 24 cm/s = _____14.4_____ m/min

6. A car drove for 43 minutes at a speed of 65 km/h. How many kilometers did it go? (Note: both time units must be the same, so one of them needs to be converted!)

   46.6 km

7. The speed of an airplane was 720 km/h. How long would it take the plane to fly 245,690 m? (Note: both distance units must be the same, so one of them needs to be converted!)

   0.34 h