**Dimensional Analysis**

Dimensional Analysis:As easy as multiplying by 1!

1) A cheetah can run at 120 kilometers per hour. How many meters can it run per second?

Answer: 33.333 m/s

2) How many seconds are there in 2 years?

Answer: 63,072,00 sec

3) How many centimeters are in one yard? (where 1 in = 2.54 cm; 1 yd = 3 ft)

Answer: 91.44 cm

4) One kilogram of aspirin would equate to taking how many 5-gram aspirin tablets?

Answer: 200 5-gram aspirin tablets

5) =

Answer: 13600 kg/m3

6) Ricky is going on a road trip that is 100 kilometers long. His average speed is 70 kilometers per hour. At that speed, he can drive 5 kilometers for every liter of fuel that he uses. Fuel cost $0.60 dollars per liter. What is the cost of fuel for the trip?

Answer: $12