Dimensional Analysis Worksheet

Show your work including cancelling all units.

1) How many in	nches are there in a	n mile? (5280 feet	long)		
				= [
2) How many so	econds are in a yea	nr?			
				=	=
3) How many m	neters are in a light	t-year if the speed	of light is 300	,000,000	m/sec.
				=	
4) An adult mos	squito's lifespan is	about 16 days. Ho	ow many minu	tes is tha	ıt?
				=	
5) How many y sleep/night.	ears of your life w	ill you be sleep if	you live 3.95	x 10 ⁷ mii	nutes and average 8 hours
				_	
				_	
6) How many a weighs 107.9 gr		ram of silver, if th	ere are 6.02 x	10^{23} atom	ms per mole and silver
				=	

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8) If there are three teaspoons in a tablespoon, 16 tablespoons in a cup, 2 cups in a pint, and 8 pints in a gallon. How many tablespoons are in a 1000-gallon swimming pool?



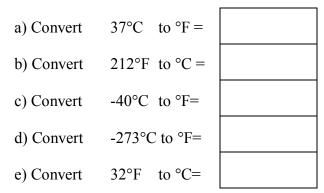
9) Aroldis Chapman of the Cincinnati Reds can throw a fastball at 101 mph. The mound is 60 feet from home plate, how long will it take a wild pitch to hit the batter?



11) If the density of gold is 19.30 g/ml and I have a gold bar with the dimensions of 65mm x 32mm x 14mm. One milliliter has the dimensions of 1 cm³



12) The conversion from Fahrenheit to Celsius is $1.8*^{\circ}C + 32 = {^{\circ}F}$.





13) A cheetah can run up to 70 mph. How long will it take to catch a antelope running 45 mph, if the antelope has a 50 yard head start?