

1. The antihistamine Benadryl is often prescribed for allergies. A typical dose for a 100-pound person is 25 mg every six hours.
 - (i) Following this dosage, how many 12.5 mg chewable tablets would be taken in a week?
 - (ii) Following this dosage, how much Benadryl would a 150-pound person take during a week?
 - (iii) Benadryl also comes in liquid form with a concentration of 12.5 mg/5 mL.
 - (a) Following the prescribed dosage, how much liquid Benadryl should a 100-pound person take in a week?
 - (b) Following the prescribed dosage, how much liquid Benadryl should a 150-pound person take in a week?

2. According to the Centers for Disease Control and Prevention, 3,978,497 babies were born in the United States during 2015[†]. Determine the birth rate for 2015 in units of
 - (i) births per minute and
 - (ii) births per second.

3. If you sleep an average of eight hours each night.
 - (i) How many hours could you sleep during one year?
 - (ii) How many hours could you sleep during your lifetime
 - (a) if you live in Monaco where the average life expectancy is 89.42 years (93.45 years for females and 85.55 years for males)[‡]?
 - (b) if you live in Australia where the average life expectancy is 82.31 years (84.92 years for females and 79.83 years for males)[♥]?
 - (c) if you live in the United States where the average life expectancy is 79.13 years (81.64 years for females and 76.73 years for males)[♦]?
 - (d) if you live in India where the average life expectancy is 68.78 years (70.14 years for females and 67.55 years for males)[†]?

4. According to Glassdoor.com^{*}, *Macy's* pays sales associates \$9.40 per hour. What is your gross pay for one year if you work thirty hours per week?

5. According to Glassdoor.com^{*}, Advanced Repair Agents of *BestBuy's* Geek Squad are paid an hourly wage of \$13.95.
 - (i) If you work seven hours each day, what is your gross pay for a month?
 - (ii) If you work twenty hours during a week, what is your gross pay for a year?

[†] https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_01.pdf <https://www.cdc.gov/nchs/fastats/births.htm>

[♦] <http://www.geoba.se/country.php?cc=MC&year=2017>

[♥] <http://www.geoba.se/country.php?cc=AU&year=2017>

[◇] <http://www.geoba.se/country.php?cc=US&year=2017>

[†] <http://www.geoba.se/country.php?cc=IN&year=2017>

^{*} <https://www.glassdoor.com/Hourly-Pay/Macy-s-Hourly-Pay-E1079.htm> (Updated November 25, 2017)

[♦] <https://www.glassdoor.com/Hourly-Pay/Geek-Squad-Hourly-Pay-E307701.htm> (Updated December 4, 2017)