Bellwork   Alg 2   Sec 8-1   #2

1. The number of cells of a certain bacteria doubles (increases by 100%) every 30 minutes. There are 400 cells at 2:00 am. Find the number of cells at each time.

a) Noon the same day.   b) 6:45 am the same day.   c) 10:15 pm the previous day.

2. Every 40 minutes the amount of medicine in your body decreases by 50% (called the half-life). If you took a 400mg dose at 10:00am find the amount of medicine in your system at each time.

a. 2:00 pm the same day.   b. 4:30 pm the same day.

3. Every five years the population of a city increases 11%. The population of this city in 1995 was 89,000. Find the population of this city in the following years to the nearest whole number.

a) 2005   b) 1982   c) 2017

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