

1. (1 point) Chapter1/sec5prob3v2020.pg

According to AEI.org, Baltimore metro area homes have appreciated in value, on average, 2.6% from 2012-2019. The Baltimore Neighborhood Indicators Alliance gives the median price of homes sold for the following Baltimore City neighborhoods of Greater Govans (Govans), North Baltimore/Guilford/Homeland (Guilford), and Sandtown-Winchester/Harlem Park (Sandtown) in the year 2017.

Assuming 2.6% annual appreciation on median housing prices, what would the median price be in 10 years? What about in 2045?

Round your answers to the nearest cent, and do not put dollar signs or commas in your answers.

MEDIAN PRICE (\$) OF HOMES

Neighborhood	In 2017	In 10 years	In 2045
Govans	71,300	_____	_____
Guilford	377,500	_____	_____
Sandtown	34,500	_____	_____

TIP: Use a spreadsheet to make these calculations.

2. (1 point) Chapter1/sec7prob9.pg

Many subprime mortgages have higher interest rates, sometimes the difference between a rate of 4.25% and 7.25%. According to Epi.org, studies have shown that in 2006 subprime mortgages were given out at higher rates to Hispanics and African-Americans than to whites. These studies, "coupled with the long history of racial discrimination in lending, raise the prospect that discrimination may be a factor in the high rates of subprime loans among Hispanics and African Americans." [1]

Suppose a 15 year mortgage of \$150000 is given at these two different rates of interest. Find the total amount of the loan in that amount of time if it is compounded

Monthly at 4.25% per year: _____

Monthly at 7.25% per year: _____

Continuously at 4.25%: _____

Continuously at 7.25%: _____

[1] Austin, Algernon "Subprime mortgages are nearly double for Hispanics and African Americans", *Epi.org*, Economic Policy Institute, 10 June 2008,

https://www.epi.org/publication/webfeatures_snapshots_20080611/

Note that these are more basic calculations than what are used to figure out mortgage payments, etc.