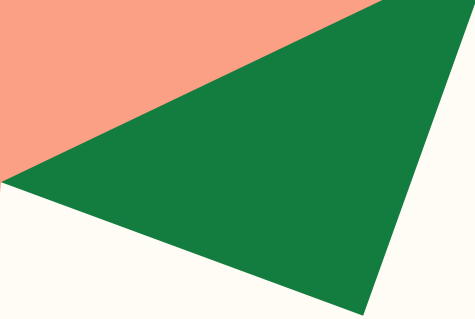
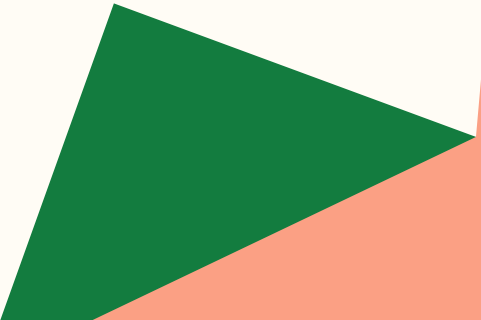




Day 4 Pre-Class: Numerical vs Categorical

Sept. 14 2026



Numerical Vs Categorical

	loan_amount	interest_rate	term	grade	state	annual_income	homeownership	debt_to_income
0	28000	14.07	60	C	NJ	90000.0	MORTGAGE	18.01
1	5000	12.61	36	C	HI	40000.0	RENT	5.04
2	2000	17.09	36	D	WI	40000.0	RENT	21.15
3	21600	6.72	36	A	PA	30000.0	RENT	10.16
4	23000	14.07	36	C	CA	35000.0	RENT	57.96

- **Numerical (quantitative):** Data represented by numbers AND where mathematical calculations hold real world meaning and make sense
 - **Discrete:** When the values are counted in distinct steps
 - **Continuous:** When the values have infinitely many possible values

Numerical Vs Categorical

	loan_amount	interest_rate	term	grade	state	annual_income	homeownership	debt_to_income
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4	23000	14.07	36	C	CA	35000.0	RENT	57.96

- **Categorical (qualitative):** Data that labels, groups, or describes
 - **Ordinal:** categories that have a hierarchy or meaningful rank.
 - **Nominal:** When labels have no inherent/meaningful system of ranking.

Next Step:
Do the Quiz in Canvas