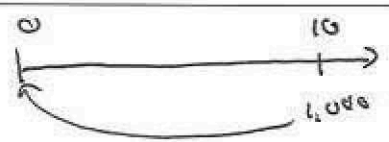
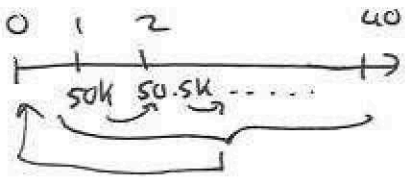
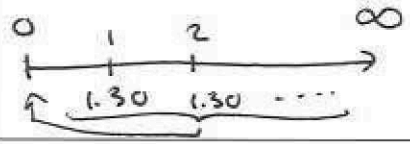
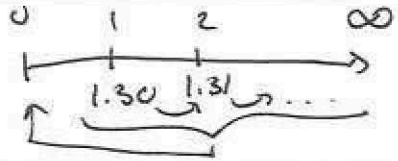
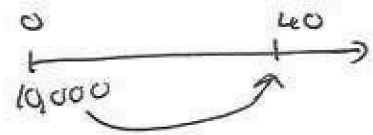
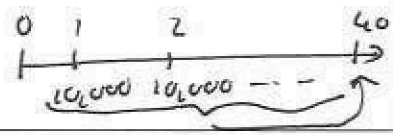
PV or FV?	One or Many CFs?	Limited time or forever?	Growing?	Name of formula	Formula	Example timeline	Example Problem
PV	One	N/A, only one CF	N/A, only one CF	PV single CF	$PV = \frac{FV}{(1+r)^t}$		You want to spend $1,000 in 10 years. If you can invest at 5%, how much do you need to save right now?
PV	Many	Limited time	No	PV Annuity	$C * \left(\frac{1 - \frac{1}{(1+r)^t}}{r}\right)$		You are retiring this year. You need $50,000 every year for 40 years in retirement, starting at the end of the year. How much do you need to have at the beginning of retirement?
PV	Many	Limited time	Yes	PV Growing Annuity	$C \times \left[\frac{1-\left(\frac{1+g}{1+r}\right)^t}{r-g}\right]$		You are retiring and need enough money every year for 40 years. You need $50,000 at the end of the year, but that number will increase by 1% every year. How much do you need at the beginning of retirement?
PV	Many	Forever	No	PV Perpetuity	$PV = \frac{C}{r}$		A stock will pay a $1.30 dividend every year forever. Your discount rate is 8.3%. What is the stock worth right now?
PV	Many	Forever	Yes	PV growing perpetuity	$PV = \frac{C}{r-g}$		A stock will pay a $1.30 dividend next year, but it will grow at a rate of 0.5% every year forever. Your discount rate is 8.3%. What is the stock worth right now?
FV	One	N/A, only one CF	N/A, only one CF	FV single CF	$FV = C * (1+r)^t$		You invest $10,000 right now for 40 years at a rate of 9%. How much will you have?
FV	Many	Limited time	No	FV Annuity	$FV = C * [\frac{(1+r)^t - 1}{r}]$		You invest $10,000 every year for 40 years at a rate of 9%, starting at the end of the year. How much will you have in 40 years?