HEC Paris	Financial Ec	conomics – Fall 2018 Quiz 3	
LAST NAME		FIRST NAME	
2-asset portfolio P with composition $E(r_P) = x_A E(r_A) + x_B E(r_B)$	· /	$P_{a}^{2} + x_{B}^{2}\sigma_{B}^{2} + 2x_{A}x_{B}\sigma_{A}\sigma_{B}\rho_{AB}$ $\rho_{AB} = \frac{Cov(r_{A}, r_{B})}{\sigma_{A} \times \sigma_{B}}$	
The following applies to all question There are two risky assets, asset A at $\sigma_B = 30\%$; $\rho_{AB} = 0.8$. a) If the return of asset A will expectation $E(r_A)$, then	nd asset B, where	 E E(r_A) = 20%, E(r_B) = 10%, σ_A = 10%, It is likely but not certain that the return of will be above its expectation E(r_B). It is likely but not certain that the return of E be below its expectation E(r_B). We can say nothing about how the return of compare to its expectation E(r_B) It is certain that the return of B will be above expectation E(r_B) 	8 will B will e its
b) Is it possible to build a portfol expected return of 30% ?	o with	 It is certain that the return of B will be below expectation E(r_B) No, this is not possible Yes by taking long positions in both assets. Yes by shorting A and buying B Yes by buying A and shorting B 	v ıts
c) What is the standard deviation portfolio with composition $\{x_A = 0\}$		□ 10% □ 11 .40% □ 15.81% □ 19.24% □ 20%	
d) To maximize the expected reportfolio you should	eturn of your	 Put all your money into asset A Put all your money into asset B Buy both A and B Buy A and short B Short A and buy B 	
e) If you believe that the price of A substantially, which one of the follo on asset B you believe will be most	wing strategies	 Buy B Short Sell B Take no position in B None of the above 	

HEC Faris	Financiai Economics – Fan 2018	Quiz 3
LAST NAME	FIRST NAME	
2-asset portfolio P with composition $E(r_P) = x_A E(r_A) + x_B E(r_B)$ V	$\{x_A, x_B\}:$ $ar(r_P) = x_A^2 \sigma_A^2 + x_B^2 \sigma_B^2 + 2x_A x_B \sigma_A \sigma_B \rho_{AB} \qquad \rho_A$	$_{B} = \frac{Cov(r_{A}, r_{B})}{\sigma_{A} \times \sigma_{B}}$
The following applies to all question. There are two risky assets, asset A and $\sigma_B = 30\%$; $\rho_{AB} = -0.8$. a) If the return of asset A will be expectation $E(r_A)$, then	asset B, where $E(r_A) = 20\%$, $E(r_B) = 10\%$, σ_A It is likely but not certain be above its expectation E It is likely but not certain	that the return of B will $E(r_B)$. n that the return of B tion $E(r_B)$. t how the return of B will $E(r_B)$ of B will be above its
b) Is it possible to build a portfolio expected return of 18% ?	 with No, this is not possible Yes by taking long position Yes by shorting A and buyin Yes by buying A and shortin 	g B
c) What is the standard deviation of portfolio with composition $\{x_A = 0\}$		
d) To maximize the expected retr portfolio you should	urn of your Put all your money into a Put all your money into a Put all your money into a Buy both A and B Buy A and short B Short A and buy B 	

Quiz 3

e) If you believe that the price of **A** will decrease substantially, which one of the following strategies on asset **B** you believe will be most profitable?

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- Buy B
- □ Short Sell B
- **Take no position in B**
- □ None of the above

	Tinanciai Economics – Fan 2010 Quiz 5				
LAST NAME	FIRST NAME				
2-asset portfolio P with composition $\{x_A, x_B\}$: $E(r_P) = x_A E(r_A) + x_B E(r_B) \qquad Var(r_P) = x_A^2 \sigma_A^2 + x_B^2 \sigma_B^2 + 2x_A x_B \sigma_A \sigma_B \rho_{AB} \qquad \rho_{AB} = \frac{Cov(r_A, r_B)}{\sigma_A \times \sigma_B}$					
The following applies to all questions below: There are two risky assets, asset A and asset B, where $E(r_A) = 20\%$, $E(r_B) = 10\%$, $\sigma_A = 10\%$, $\sigma_B = 30\%$; $\rho_{AB} = 0$.					
a) If the return of asset A will be expectation $E(r_A)$, then	 It is likely but not certain that the return of B will be above its expectation E(r_B). It is likely but not certain that the return of B will be below its expectation E(r_B). We can say nothing about how the return of B will compare to its expectation E(r_B) It is certain that the return of B will be above its expectation E(r_B) It is certain that the return of B will be below its expectation E(r_B) It is certain that the return of B will be below its expectation E(r_B) 				
b) Is it possible to build a portfolio we expected return of 5% ?	 vith No, this is not possible Yes by taking long positions in both assets. Yes by shorting A and buying B Yes by buying A and shorting B 				
c) What is the standard deviation of a portfolio with composition $\{x_A = 0.5, $					
d) To maximize the expected return portfolio you should	 Put all your money into asset A Put all your money into asset B Buy both A and B Buy A and short B Short A and buy B 				

Quiz 3

e) If you believe that the price of **B** will decrease substantially, which one of the following strategies on asset **A** you believe will be most profitable?

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Buy A

□ Short Sell A

D Take no position in A

□ None of the above

I mancial Ex	conomics – Fan 2018 Quiz 5				
	FIRST NAME				
$\{x_A, x_B\}:$ $Var(r_P) = x_A^2 \sigma_A^2$	$P_{a}^{2} + x_{B}^{2}\sigma_{B}^{2} + 2x_{A}x_{B}\sigma_{A}\sigma_{B}\rho_{AB}$ $\rho_{AB} = \frac{Cov(r_{A},r_{B})}{\sigma_{A}\times\sigma_{B}}$				
The following applies to all questions below: There are two risky assets, asset A and asset B, where $E(r_A) = 10\%$, $E(r_B) = 20\%$, $\sigma_A = 10\%$, $\sigma_B = 30\%$; $\rho_{AB} = -1$.					
be above its	 It is likely but not certain that the return of B will be above its expectation E(r_B). It is likely but not certain that the return of B will be below its expectation E(r_B). We can say nothing about how the return of B will compare to its expectation E(r_B) It is certain that the return of B will be above its expectation E(r_B) It is certain that the return of B will be below its expectation E(r_B) It is certain that the return of B will be below its expectation E(r_B) 				
o with	 No, this is not possible Yes by taking long positions in both assets. Yes by shorting A and buying B Yes by buying A and shorting B 				
	 10% 11.40% 15.81% 19.24% 20% 				
turn of your	 Put all your money into asset A Put all your money into asset B Buy both A and B Buy A and short B Short A and buy B 				
	$\overline{\{x_A, x_B\}}:$ $Var(r_P) = x_A^2 \sigma_A^2$ ons below:				

Quiz 3

e) If you believe that the price of **A** will decrease substantially, which one of the following strategies on asset **B** you believe will be most profitable?

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🗆 Buy B

□ Short Sell B

Take no position in B

 $\Box \quad \text{None of the above}$