Math 084 W2010 Worksheet 3.1 v01b Interest Exercises Dressler			
Name_	Name		
Solve.	1) Kevin invested part of his \$10,000 bonus in a certificate of deposit that paid 6% annual interest, and the remainder in a mutual fund that paid 11% annual interest. If his total interest for that year was \$800, how much did Kevin invest in the mutual fund?		
	2) Kevin invested part of his \$10,000 bonus in a certificate of deposit that paid 6% annual interest, and the remainder in a mutual fund that paid 11% annual interest. If his total interest for that year was \$700, how much did Kevin invest in the mutual fund?		
	3) Kevin invested part of his \$10,000 bonus in a certificate of deposit that paid 6% annual interest, and the remainder in a mutual fund that paid 11% annual interest. If his total interest for that year was \$900, how much did Kevin invest in the mutual fund?		
	4) How can \$70,000 be invested, part at 4% annual interest and the remainder at 10% annual interest, so that the interest earned by the two accounts is equal at the end of the year?		
	5) How can \$42,000 be invested, part at 4% annual interest and the remainder at 10% annual interest, so that the interest earned by the two accounts is equal at the end of the year?		
	6) How can \$56,000 be invested, part at 4% annual interest and the remainder at 10% annual interest, so that the interest earned by the two accounts is equal at the end of the year?		

7) Melissa invested a sum of money at 3% annual interest. She invested three times that sum at 5% annual interest. If her total yearly interest from both investments was \$7200, how much was invested at 3%?	Ł.
8) If \$26,000 is invested at 10% annual interest, how much should be invested at 12% annual interest so that the total yearly income from both investments is \$5000?	
9) Don James wants to invest \$51,000 to earn \$4790 per year. He can invest in B-rated bonds paying 13% per year or in a Certificate of Deposit (CD) paying 5% per year. How much money should be invested in each to realize exactly \$4790 in interest per year?	
10) A bank loaned out \$65,000, part of it at the rate of 15% per year and the rest at a rate of 4% per year. If the interest received was \$5460, how much was loaned at 15%?	
11) A loan officer at a bank has \$84,000 to lend and is required to obtain an average return of 16% per year. If he can lend at the rate of 17% or the rate of 12%, how much can he lend at the 12% rate and still meet his required return?	n
12) A college student earned \$8900 during summer vacation working as a waiter in a popular restaurant. The student invested part of the money at 10% and the rest at 8%. If the student received a total of \$778 in interest at the end of the year, how much was invested at 10%?	t
13) A college student earned \$6200 during summer vacation working as a waiter in a popular restaurant. The student invested part of the money at 8% and the rest at 7%. If the student received a total of \$460 in interest at the end of the year, how much was invested at 8%?	
14) A college student earned \$7700 during summer vacation working as a waiter in a popular restaurant. The student invested part of the money at 7% and the rest at 6%. If the student received a total of \$489 in interest at the end of the year, how much was invested at 7%?	

	A loan officer at a bank has \$98,000 to lend and is required to obtain an average return of 16% per year. If he can lend at the rate of 17% or the rate of 15%, how much can he lend at the 15% rate and still meet his required return?
	A loan officer at a bank has \$82,000 to lend and is required to obtain an average return of 15% per year. If he can lend at the rate of 16% or the rate of 14%, how much can he lend at the 14% rate and still meet his required return?
	A bank loaned out \$60,000, part of it at the rate of 15% per year and the rest at a rate of 8% per year. If the interest received was \$7180, how much was loaned at 15%?
	A bank loaned out \$67,000, part of it at the rate of 15% per year and the rest at a rate of 5% per year. If the interest received was \$5850, how much was loaned at 15%?
	Don James wants to invest \$55,000 to earn \$5700 per year. He can invest in B-rated bonds paying 13% per year or in a Certificate of Deposit (CD) paying 8% per year. How much money should be invested in each to realize exactly \$5700 in interest per year?
	Don James wants to invest \$53,000 to earn \$5440 per year. He can invest in B-rated bonds paying 12% per year or in a Certificate of Deposit (CD) paying 8% per year. How much money should be invested in each to realize exactly \$5440 in interest per year?
	If \$2000 is invested at 10% annual interest, how much should be invested at 12% annual interest so that the total yearly income from both investments is \$5000?
22)	If $$14,000$ is invested at 10% annual interest, how much should be invested at 12% annual interest so that the total yearly income from both investments is $$5000$?

e) Melissa invested a sum of money at 3% annual interest. She invested three times that sum at 5% If her total yearly interest from both investments was \$5400, how much was invested at 3%?	% annual interest.

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 $23) \ Melissa\ invested\ a\ sum\ of\ money\ at\ 3\%\ annual\ interest.\ She\ invested\ three\ times\ that\ sum\ at\ 5\%\ annual\ interest.$

If her total yearly interest from both investments was \$3600, how much was invested at 3%?

Answer Key

Testname: 03.1V01B

- 1) \$4000
- 2) \$2000
- 3) \$6000
- 4) \$50,000 invested at 4%; \$20,000 invested at 10%
- 5) \$30,000 invested at 4%; \$12,000 invested at 10%
- 6) \$40,000 invested at 4%; \$16,000 invested at 10%
- 7) \$40,000
- 8) \$20,000
- 9) \$28,000 in B-rated bonds and \$23,000 in a CD
- 10) \$26,000
- 11) \$16,800.00
- 12) \$3300
- 13) \$2600
- 14) \$2700
- 15) \$49,000.00
- 16) \$41,000.00
- 17) \$34,000
- 18) \$25,000
- 19) \$26,000 in B-rated bonds and \$29,000 in a CD
- 20) \$30,000 in B-rated bonds and \$23,000 in a CD
- 21) \$40,000
- 22) \$30,000
- 23) \$20,000
- 24) \$30,000