Math 084 W2010 Worksheet 3.1 v01a Interest Exercises Dressler

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 \$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?
- 5) How can \$28,000 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%?
- 8) If \$38,000 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 \$59,000 to earn \$6470 per year. He can invest in B-rated bonds paying 15% per year or in a Certificate of Deposit (CD) paying 8% per year. How much money should be invested in each to realize exactly \$6470 in interest per year?
- 10) A bank loaned out \$68,000, part of it at the rate of 12% per year and the rest at a rate of 8% per year. If the interest received was \$6600, how much was loaned at 12%?
- 11) A loan officer at a bank has \$82,000 to lend and is required to obtain an average return of 14% per year. If he can lend at the rate of 15% or the rate of 13%, how much can he lend at the 13% rate and still meet his required return?
- 12) A college student earned \$6600 during summer vacation working as a waiter in a popular restaurant. The student invested part of the money at8% and the rest at 6%. If the student received a total of \$448 in interest at the end of the year, how much was invested at8%?
- 13) A college student earned \$6400 during summer vacation working as a waiter in a popular restaurant. The student invested part of the money at 9% and the rest at 7%. If the student received a total of \$490 in interest at the end of the year, how much was invested at 9%?
- 14) A college student earned \$7200 during summer vacation working as a waiter in a popular restaurant. The student invested part of the money at9% and the rest at 7%. If the student received a total of \$546 in interest at the end of the year, how much was invested at9%?

- 15) A loan officer at a bank has \$84,000 to lend and is required to obtain an average return of 13% per year. If he can lend at the rate of 14% or the rate of 10%, how much can he lend at the 10% rate and still meet his required return?
- 16) A loan officer at a bank has \$89,000 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?
- 17) A bank loaned out \$64,000, part of it at the rate of 11% per year and the rest at a rate of 4% per year. If the interest received was \$4660, how much was loaned at 11%?
- 18) A bank loaned out \$67,000, part of it at the rate of 12% per year and the rest at a rate of 6% per year. If the interest received was \$6120, how much was loaned at 12%?
- 19) Don James wants to invest \$66,000 to earn \$5920 per year. He can invest in B-rated bonds paying 13% per year or in a Certificate of Deposit (CD) paying 6% per year. How much money should be invested in each to realize exactly \$5920 in interest per year?
- 20) Don James wants to invest \$68,000 to earn \$5800 per year. He can invest in B-rated bonds paying 11% per year or in a Certificate of Deposit (CD) paying 7% per year. How much money should be invested in each to realize exactly \$5800 in interest per year?
- 21) 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?

- 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%?
- 24) 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 \$5400, how much was invested at 3%?

## Answer Key Testname: 03.1V01A

1) \$4000 2) \$2000 3) \$6000 4) \$30,000 invested at 4%; \$12,000 invested at 10% 5) \$20,000 invested at 4%; \$8000 invested at 10% 6) \$40,000 invested at 4%; \$16,000 invested at 10% 7) \$40,000 8) \$10,000 9) \$25,000 in B-rated bonds and \$34,000 in a CD 10) \$29,000 11) \$41,000.00 12) \$2600 13) \$2100 14) \$2100 15) \$21,000.00 16) \$44,500.00 17) \$30,000 18) \$35,000 19) \$28,000 in B-rated bonds and \$38,000 in a CD 20) \$26,000 in B-rated bonds and \$42,000 in a CD 21) \$40,000 22) \$30,000 23) \$20,000 24) \$30,000