

4.5 Practice - Value Problems

Solve.

- 1) A collection of dimes and quarters is worth \$15.25. There are 103 coins in all. How many of each is there?
- 2) A collection of half dollars and nickels is worth \$13.40. There are 34 coins in all. How many are there?
- 3) The attendance at a school concert was 578. Admission was \$2.00 for adults and \$1.50 for children. The total receipts were \$985.00. How many adults and how many children attended?
- 4) A purse contains \$3.90 made up of dimes and quarters. If there are 21 coins in all, how many dimes and how many quarters were there?
- 5) A boy has \$2.25 in nickels and dimes. If there are twice as many dimes as nickels, how many of each kind has he?
- 6) \$3.75 is made up of quarters and half dollars. If the number of quarters exceeds the number of half dollars by 3, how many coins of each denomination are there?
- 7) A collection of 27 coins consisting of nickels and dimes amounts to \$2.25. How many coins of each kind are there?
- 8) \$3.25 in dimes and nickels, were distributed among 45 boys. If each received one coin, how many received dimes and how many received nickels?
- 9) There were 429 people at a play. Admission was \$1 each for adults and 75 cents each for children. The receipts were \$372.50. How many children and how many adults attended?
- 10) There were 200 tickets sold for a women's basketball game. Tickets for students were 50 cents each and for adults 75 cents each. The total amount of money collected was \$132.50. How many of each type of ticket was sold?
- 11) There were 203 tickets sold for a volleyball game. For activity-card holders, the price was \$1.25 each and for noncard holders the price was \$2 each. The total amount of money collected was \$310. How many of each type of ticket was sold?
- 12) At a local ball game the hotdogs sold for \$2.50 each and the hamburgers sold for \$2.75 each. There were 131 total sandwiches sold for a total value of \$342. How many of each sandwich was sold?
- 13) At a recent Vikings game \$445 in admission tickets was taken in. The cost of a student ticket was \$1.50 and the cost of a non-student ticket was \$2.50. A total of 232 tickets were sold. How many students and how many non-students attended the game?
- 14) A bank contains 27 coins in dimes and quarters. The coins have a total value of \$4.95. Find the number of dimes and quarters in the bank.

- 15) A coin purse contains 18 coins in nickels and dimes. The coins have a total value of \$1.15. Find the number of nickels and dimes in the coin purse.
- 16) A business executive bought 40 stamps for \$9.60. The purchase included 25¢ stamps and 20¢ stamps. How many of each type of stamp were bought?
- 17) A postal clerk sold some 15¢ stamps and some 25¢ stamps. Altogether, 15 stamps were sold for a total cost of \$3.15. How many of each type of stamps were sold?
- 18) A drawer contains 15¢ stamps and 18¢ stamps. The number of 15¢ stamps is four less than three times the number of 18¢ stamps. The total value of all the stamps is \$1.29. How many 15¢ stamps are in the drawer?
- 19) The total value of dimes and quarters in a bank is \$6.05. There are six more quarters than dimes. Find the number of each type of coin in the bank.
- 20) A child's piggy bank contains 44 coins in quarters and dimes. The coins have a total value of \$8.60. Find the number of quarters in the bank.
- 21) A coin bank contains nickels and dimes. The number of dimes is 10 less than twice the number of nickels. The total value of all the coins is \$2.75. Find the number of each type of coin in the bank.
- 22) A total of 26 bills are in a cash box. Some of the bills are one dollar bills, and the rest are five dollar bills. The total amount of cash in the box is \$50. Find the number of each type of bill in the cash box.
- 23) A bank teller cashed a check for \$200 using twenty dollar bills and ten dollar bills. In all, twelve bills were handed to the customer. Find the number of twenty dollar bills and the number of ten dollar bills.
- 24) A collection of stamps consists of 22¢ stamps and 40¢ stamps. The number of 22¢ stamps is three more than four times the number of 40¢ stamps. The total value of the stamps is \$8.34. Find the number of 22¢ stamps in the collection.
- 25) A total of \$27000 is invested, part of it at 12% and the rest at 13%. The total interest after one year is \$3385. How much was invested at each rate?
- 26) A total of \$50000 is invested, part of it at 5% and the rest at 7.5%. The total interest after one year is \$3250. How much was invested at each rate?
- 27) A total of \$9000 is invested, part of it at 10% and the rest at 12%. The total interest after one year is \$1030. How much was invested at each rate?
- 28) A total of \$18000 is invested, part of it at 6% and the rest at 9%. The total interest after one year is \$1248. How much was invested at each rate?
- 29) An inheritance of \$10000 is invested in 2 ways, part at 9.5% and the remainder at 11%. The combined annual interest was \$1038.50. How much was invested at each rate?
- 30) Kerry earned a total of \$900 last year on his investments. If \$7000 was invested at a certain rate of return and \$9000 was invested in a fund with a rate that was 2% higher, find the two rates of interest.

- 31) Jason earned \$256 interest last year on his investments. If \$1600 was invested at a certain rate of return and \$2400 was invested in a fund with a rate that was double the rate of the first fund, find the two rates of interest.
- 32) Millicent earned \$435 last year in interest. If \$3000 was invested at a certain rate of return and \$4500 was invested in a fund with a rate that was 2% lower, find the two rates of interest.
- 33) A total of \$8500 is invested, part of it at 6% and the rest at 3.5%. The total interest after one year is \$385. How much was invested at each rate?
- 34) A total of \$12000 was invested, part of it at 9% and the rest at 7.5%. The total interest after one year is \$1005. How much was invested at each rate?
- 35) A total of \$15000 is invested, part of it at 8% and the rest at 11%. The total interest after one year is \$1455. How much was invested at each rate?
- 36) A total of \$17500 is invested, part of it at 7.25% and the rest at 6.5%. The total interest after one year is \$1227.50. How much was invested at each rate?
- 37) A total of \$6000 is invested, part of it at 4.25% and the rest at 5.75%. The total interest after one year is \$300. How much was invested at each rate?
- 38) A total of \$14000 is invested, part of it at 5.5% and the rest at 9%. The total interest after one year is \$910. How much was invested at each rate?
- 39) A total of \$11000 is invested, part of it at 6.8% and the rest at 8.2%. The total interest after one year is \$797. How much was invested at each rate?
- 40) An investment portfolio earned \$2010 in interest last year. If \$3000 was invested at a certain rate of return and \$24000 was invested in a fund with a rate that was 4% lower, find the two rates of interest.
- 41) Samantha earned \$1480 in interest last year on her investments. If \$5000 was invested at a certain rate of return and \$11000 was invested in a fund with a rate that was two-thirds the rate of the first fund, find the two rates of interest.
- 42) A man has \$5.10 in nickels, dimes, and quarters. There are twice as many nickels as dimes and 3 more dimes than quarters. How many coins of each kind were there?
- 43) 30 coins having a value of \$3.30 consists of nickels, dimes and quarters. If there are twice as many quarters as dimes, how many coins of each kind were there?
- 44) A bag contains nickels, dimes and quarters having a value of \$3.75. If there are 40 coins in all and 3 times as many dimes as quarters, how many coins of each kind were there?



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Answers - Value Problems

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|--------------------------------------|--------------------|---------------------|
| 1) 33Q, 70D | 19) 13 d, 19 q | \$5000 @ 3.5% |
| 2) 26 h, 8 n | 20) 28 q | 34) \$7000 @ 9% |
| 3) 236 adult, 342 child | 21) 15 n, 20 d | \$5000 @ 7.5% |
| 4) 9d, 12q | 22) 20 \$1, 6 \$5 | 35) \$6500 @ 8%; |
| 5) 9, 18 | 23) 8 \$20, 4 \$10 | \$8500 @ 11% |
| 6) 7q, 4h | 24) 27 | 36) \$12000 @ 7.25% |
| 7) 9, 18 | 25) \$12500 @ 12% | \$5500 @ 6.5% |
| 8) 25, 20 | \$14500 @ 13% | 37) \$3000 @ 4.25%; |
| 9) 203 adults, 226 child | 26) \$20000 @ 5% | \$3000 @ 5.75% |
| 10) 130 adults, 70
students | \$30000 @ 7.5% | 38) \$10000 @ 5.5% |
| 11) 128 card, 75 no card | 27) \$2500 @ 10% | \$4000 @ 9% |
| 12) 73 hotdogs,
58 hamburgers | \$6500 @ 12% | 39) \$7500 @ 6.8%; |
| 13) 135 students,
97 non-students | 28) \$12400 @ 6% | \$3500 @ 8.2% |
| 14) 12d, 15q | \$5600 @ 9% | 40) \$3000 @ 11%; |
| 15) 13n, 5d | 29) \$4100 @ 9.5% | \$24000 @ 7% |
| 16) 8 20c, 32 25c | \$5900 @ 11% | 41) \$5000 @ 12% |
| 17) 6 15c, 9 25c | 30) \$7000 @ 4.5% | \$11000 @ 8% |
| 18) 5 | \$9000 @ 6.5% | 42) 26n, 13d, 10q |
| | 31) \$1600 @ 4%; | 43) 18, 4, 8 |
| | \$2400 @ 8% | 44) 20n, 15d, 10q |
| | 32) \$3000 @ 4.6% | |
| | \$4500 @ 6.6% | |
| | 33) \$3500 @ 6%; | |



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