









First Name: _____	Last Name: _____	Grade: _____
Teacher: _____	Parent's email: _____	

## Coins and Money Problems

Welcome to the Math Challenge #10. In order to solve the math problems in this challenge, we need to be able to understand each type of U.S. coin and its value.

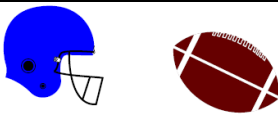

Coin's name	Penny	Nickel	Dime	Quarter	Half Dollar	One Dollar
Value	<b>1 cent</b>	<b>5 cents</b>	<b>10 cents</b>	<b>25 cents</b>	<b>50 cents</b>	<b>100 cents or \$1.00</b>
						

Some problems may be easier to solve by using real coins or by drawing the problems out.

If you are new to any of the problem solving strategies, check out our complete overview of elementary problem solving strategies at <https://www.mathinaction.org/problem-solving-strategies.html>.

**Kinder & First Grade: solve at least 3 problems.**  
**Second & Third Grade: solve at least 7 problems.**  
**Fourth Grade and above: solve at least 12 problems.**

	<i>Answer</i>
1. Sanjay has 2 nickels. He wants to exchange those coins for pennies. How many pennies will he get?	
2. Ron only has nickels and they are worth 40 cents. How many nickels does Ron have?	
3. Lana would like to buy a gumball from the gumball machine. Each gumball is 25 cents. She has 7 coins, and they are all nickels. How many coins will she have left after getting one gumball from the machine?	
4. Ryan would like to buy a lollipop. It costs 65 cents. He gave the store keeper three quarters. The store keeper gave him 2 identical coins in change. What type of coins did he get?	
5. Albert has four coins that add up to 80 cents. He does not have a fifty-cent coin. What could be his four coins?	

6. Jessica traded 18 dimes and 9 nickels for quarters. How many quarters did she get?	
7. Sonia has six coins. She has quarters, dimes, and a penny. She has more quarters than pennies. She has more dimes than quarters.  a. What coins does Sonia have?  b. How much money does she have altogether?	
8. Monica had some money. She gave half to her brother and spent half of what she had left. Then she lost 25 cents and only had 50 cents left. How much money did she have at first?	
9. Anita has two coins. Wanda has three coins. Both girls have the same amount of money. Neither of Anita's coins matches any of Wanda's coins. How much money (in cents) does each girl have?	
10. Josiah comes to school with \$3.15 in US coins in his pocket and he only has dimes and quarters. If there are more quarters than dimes, what is the least number of quarters he has in his pocket?	
11. Dylan has two footballs and a helmet that cost him \$40. Lewis has two helmets and a football that cost him \$47. What is the cost of each item?	
12. Marco earned \$1152 during the month of February. He was paid \$12 per hour. He did not work more than five hours each day, nor did he work on Sunday. If he worked the same whole number of hours each day, how many hours per day did he work?	
13. If I give a third of my money to charity and a quarter of what's left to buy a book, I am left with \$45.00. How much did I originally have?	

<p>14. Sai had \$6.00 that were exchanged for nickels and dimes. The number of nickels was the same as the number of dimes. How many nickels were there in the change?</p>	
<p>15. If two mangoes and three bananas cost \$5.60, while four mangoes and seven bananas cost \$11.60, what is the cost of one mango and five bananas?</p>	
<p>16. Geena had \$1.20 more than Ben. She spent <math>\frac{7}{8}</math> of her money on a pencil case which cost \$2.80. Ben spent <math>\frac{1}{4}</math> of his money on a pen. How much money did Ben have left?</p>	
<p>17. Angela had a collection of 455 pennies. She decided to exchange her 455 pennies for quarters, dime, and nickels. She wanted to have a specific amount for each coin. The number of dimes had to be twice the number of quarters and the number of nickels had to be twice the number of dimes. How many quarters did she want to have in the exchange? Hint: simplify the problem.</p>	
<p>18. Inside Allie's purse, there were 4 pennies, 2 nickels, 1 dime, and 1 quarter. Different values can be made by taking out <b>one or more coins</b> from Allie's purse. How many different values can be made?</p>	

*Solution is available on March 4, 2022, at [www.mathinaction.org](http://www.mathinaction.org)*