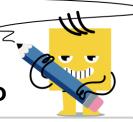
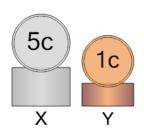


## mobius

## Algebra with Coins - N,M Coins of A,B Type and Reversed - Two Coin Types - to



Equations \$0.22



With X Nickels and Y Pennies, some coins are worth \$0.22. With Y Nickels and X Pennies they would be worth \$0.14. What equations would help us solve for X and Y?

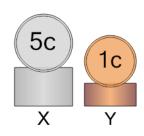
В

22 |10X + 1Y = 22

 $14\,10Y + 1X = 24$ 

30176		
Α		
5X + 1	Y	=
5Y + 1.	X	=

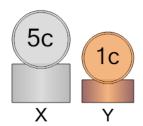
**2** \$0.11



With X Nickels and Y Pennies, some coins are worth \$0.11. With Y Nickels and X Pennies they would be worth \$0.7. What equations would help us solve for X and Y?

A B 
$$25X + 1Y = 115X + 1Y = 11$$
  $25Y + 1X = 275Y + 1X = 7$ 

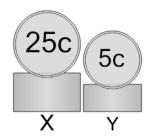
**3** \$0.23



With X Nickels and Y Pennies, some coins are worth \$0.23. With Y Nickels and X Pennies they would be worth \$0.19. What equations would help us solve for X and Y?

A B 
$$5X + 1Y = 235X + 10Y = 23$$
  $5Y + 1X = 195Y + 10X = 55$ 

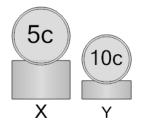
**4** \$0.80



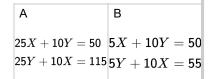
With X Quarters and Y Nickels, some coins are worth \$0.80. With Y Quarters and X Nickels they would be worth \$0.40. What equations would help us solve for X and Y?

A B 
$$25X + 5Y = 80$$
  $25X + 1Y = 80$   $25Y + 5X = 40$   $25Y + 1X = 28$ 

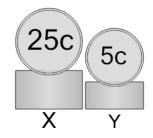
**5** \$0.50



With X Nickels and Y Dimes, some coins are worth \$0.50. With Y Nickels and X Dimes they would be worth \$0.55. What equations would help us solve for X and Y?



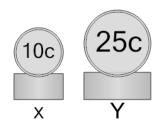
\$0.55



With X Quarters and Y Nickels, some coins are worth \$0.55. With Y Quarters and X Nickels they would be worth \$0.35. What equations would help us solve for X and Y?

A B 
$$25X + 1Y = 55$$
  $25X + 5Y = 55$   $25Y + 1X = 27$   $25Y + 5X = 35$ 

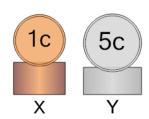
**7** \$0.55



With X Dimes and Y Quarters, some coins are worth \$0.55. With Y Dimes and X Quarters they would be worth \$0.85. What equations would help us solve for X and Y?

$$egin{array}{|c|c|c|c|c|}\hline A & B & & & & \\ 10X+25Y=55 & 10X+1Y=55 & & & \\ 10Y+25X=85 & 10Y+1X=13 & & & \\ \hline \end{array}$$

**8** \$0.13



With X Pennies and Y Nickels, some coins are worth \$0.13. With Y Pennies and X Nickels they would be worth \$0.17. What equations would help us solve for X and Y?

Α	В
1X + 10Y = 13	1X + 5Y = 13
1Y + 10X = 32	1Y + 5X = 17