

## mobius

## Algebra with Coins - X Times as Many of Coin and Total - Two Coin Types - to



**Equations** 

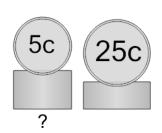
1c 25c

\$0.87

Some coins have a total value of \$0.87. There are 4 times as many Pennies than Quarters. What equations would help us solve?

$$egin{array}{c|c} \mathsf{A} & \mathsf{p} = \mathsf{4}q & \mathsf{p} = \mathsf{4}p \ & q = \mathsf{4}p \ & 1p + \mathsf{25}q = \mathsf{87} \ \mathsf{25}q + \mathsf{1}p = \mathsf{87} \ & \end{array}$$

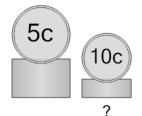
**2** \$1.05



Some coins have a total value of \$1.05. There are 2 times as many Nickels than Quarters. What equations would help us solve?

$$egin{array}{c|c} \mathsf{A} & \mathsf{B} & \mathsf{B} \\ n=2q & q=2n \\ 5n+25q=105 & 25q+5n=105 \end{array}$$

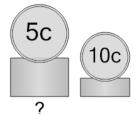
**3** \$0.20



Some coins have a total value of \$0.20. There are 2 times as many Nickels than Dimes. What equations would help us solve?

$$egin{array}{c|c} \mathsf{A} & \mathsf{B} & \mathsf{B} \\ d=2n & n=2d \\ 10d+5n=20 & 5n+10d=20 \end{array}$$

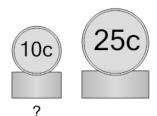
**4** \$0.20



Some coins have a total value of \$0.20. There are 2 times as many Nickels than Dimes. What equations would help us solve?

$$egin{array}{c|c} \mathsf{A} & \mathsf{B} & \mathsf{d} = 2n \ \mathsf{5}n + \mathsf{10}d = \mathsf{20} & \mathsf{10}d + \mathsf{5}n = \mathsf{20} \ \end{array}$$

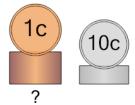
**5** \$0.90



Some coins have a total value of \$0.90. There are 2 times as many Dimes than Quarters. What equations would help us solve?

$$egin{array}{c|c} \mathsf{A} & \mathsf{B} & \mathsf{B} \ q=2d & d=2q \ \mathsf{25}q+10d=90 \ \mathsf{10}d+\mathsf{25}q=90 \ \end{array}$$

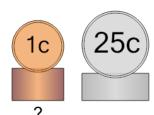
**6** \$0.28



Some coins have a total value of \$0.28. There are 4 times as many Pennies than Dimes. What equations would help us solve?

$$egin{array}{c|c} \mathsf{A} & \mathsf{B} & \mathsf{B} \\ p = \mathsf{4}d & d = \mathsf{4}p \\ \mathsf{1}p + \mathsf{10}d = \mathsf{28} & \mathsf{10}d + \mathsf{1}p = \mathsf{28} \end{array}$$

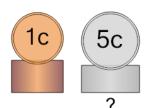
**7** \$0.29



Some coins have a total value of \$0.29. There are 4 times as many Pennies than Quarters. What equations would help us solve?

$$egin{array}{cccc} \mathsf{A} & \mathsf{p} = \mathsf{4}q & \mathsf{p} & q = \mathsf{4}p \ & 1p + \mathsf{25}q = \mathsf{29} & \mathsf{25}q + \mathsf{1}p = \mathsf{29} \end{array}$$

**8** \$0.09



Some coins have a total value of \$0.09. There are 4 times as many Pennies than Nickels. What equations would help us solve?

$$egin{array}{c|c} \mathsf{A} & n=4p & \mathsf{B} & p=4n \ 5n+1p=9 & 1p+5n=9 \end{array}$$