Answers

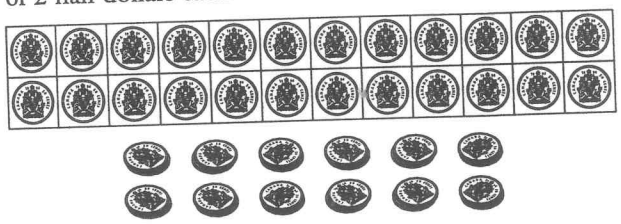
A. For example, there are 12 quarters, each worth 25 cents, so the value of the quarters is 12×25 cents.

B. For example, I could multiply 12×25. Or, I could calculate that each column is worth \$1 or 100 cents. Qi's collection has three columns. So 12 quarters are worth \$3.00 or 300 cents.

C. For example, I would make a 4-by-4 array, or 4 piles of 4 quarters each.

Each row is worth \$1 or 100 cents. Qi's collection has 4 rows. So 16 quarters are worth \$4.00 or 400 cents.

D. For example, I would make a 12-by-2 array, or 12 piles of 2 half dollars each.



Each column of two half dollars is worth \$1 or 100 cents. Qi's collection has 12 columns. So 24 half dollars are worth \$12.00 or 1200 cents.

E. For example, "What is the total value in cents and dollars of 22 nickels, 25 dimes, and 28 quarters?"

22×5 is the same as $11 \times 10 = 110$

$25 \times 10 = 250$

28×25 is the same as $7 \times 100 = 700$

The value is $110 + 250 + 700 = 1060$ cents or \$10.60.

1. For example, 34×5 is the same as 34 nickels. Since 2 nickels make 10 cents, 34×5 is the same as $17 \times 10 = 170$.

2. 17×25 is the same as $16 \times 25 + 25$. I know $16 \times 25 = 400$, so $17 \times 25 = 425$.

3. For example, using 37,

- 37×5 is the value of 37 nickels. That's the same as 18 dimes and one nickel, so the product is $18 \times 10 + 5 = 185$.
- 37×25 is the value of 37 quarters. That's the same as 9 dollars and one quarter, so the product is $9 \times 100 + 25 = 925$.
- 37×50 is the value of 37 half dollars. That's the same as 18 dollars and one half dollar, so the product is $18 \times 100 + 50 = 1850$.