

Name: Class:

Identify reasonable answer for two-step word problems

- a. Joice baked 24 muffins. She kept 3 for herself and gave the rest to be shared between 2 of her friends. She then estimated to the nearest ten that each friend will get about 10 muffins. Was this a good estimate?



- b. Peter had 256 dimes in his piggy bank. Yesterday, his brother, Charles borrowed half the number of dimes in his piggy bank. Peter estimated that, to the nearest ten, he has about 120 dimes left in his piggy bank. Is this a good estimate?



Name: Class:

Identify reasonable answer for two-step word problems

- a. Joice baked 24 muffins. She kept 3 for herself and gave the rest to be shared between 2 of her friends. She then estimated to the nearest ten that each friend will get about 10 muffins. Was this a good estimate?

Number of muffins Joice baked = 24 muffins

Number of muffins she kept for herself = 3 muffins

Number of muffins she gave to her 2 friends = $24 - 3 = 21$ muffins.

To estimate, we need to round 21 muffins to the nearest ten and divide by 2 to find the estimate number of muffins of muffins each friend got.

$$\begin{array}{r} 21 \div 2 \cong ? \\ \downarrow \quad \downarrow \\ 20 \div 2 = 10 \end{array}$$

So, **Yes**, it was a good estimate.



- b. Peter had 256 dimes in his piggy bank. Yesterday, his brother, Charles borrowed half the number of dimes in his piggy bank. Peter estimated that, to the nearest ten, he has about 120 dimes left in his piggy bank. Is this a good estimate?

Number of dimes Peter had = 256 dimes

Number of dimes Charles borrowed = half the number of dimes Peter had
 $= 256 \div 2 = 128$ dimes.

Now, let's find the number of dimes Peter is left with by subtracting the number of dimes Charles borrowed from the number of dimes Peter had.

$$(256 - 128) \text{ dimes} = 128 \text{ dimes}$$

Finally, let's round 128 dimes to the nearest ten to estimate the number of dimes Peter is left with.

$$128 \text{ dimes} \cong 130 \text{ dimes.}$$

Since 130 dimes is really bigger than 120 dimes, it means that, the estimate is too low.

So, **No**, it is not a good estimate

