

Afford It and Explain

GRADE 2

MATHEMATICS

B2.3

A friendly number is one that is easy to work with. Change a tricky number into a friendly one, do the easy sum, then fix the difference at the end. Say which strategy you used every time.

PART A: USE A FRIENDLY NUMBER

1. To take 19¢ from 45¢, take 20¢ and add 1 back: $45 - 20 = 25$, then $25 + 1 =$ _____ ¢.
2. To take 28¢ from 50¢, take 30¢ and add 2 back: $50 - 30 = 20$, then $20 + 2 =$ _____ ¢.
3. To add 17¢ and 16¢, move 3 across to make 20: $20 + 13 =$ _____ ¢.
4. To add 24¢ and 19¢, move 1 across to make 20: $23 + 20 =$ _____ ¢.

PART B: TWO THINGS AT ONCE

5. Zara has 48¢. She wants a badge for 19¢ and a sticker for 22¢. Can she buy both? Say which strategy you used.

SHOW YOUR WORK

Answer: _____

6. Umar has 35¢ and buys two things. He has 8¢ left. One of them cost 15¢. What did the other one cost?

SHOW YOUR WORK

Answer: _____

7. Sana says $26¢ + 17¢$ is about $40¢$. Is her estimate close? Work out the exact answer.

SHOW YOUR WORK

Answer: _____

PART C: PICK THE STRATEGY

8. Which is the quickest way to take $29¢$ from $50¢$?
Ⓐ Take $30¢$, then add 1 back Ⓑ Count back 29 times Ⓒ Add 29 to 50
9. You have $44¢$. Two prizes cost $18¢$ and $21¢$. Can you buy both?
Ⓐ Yes, they cost $39¢$ Ⓑ No, they cost more than $44¢$ Ⓒ Only one of them

PART D: WRITE YOUR OWN

10. Write your own store problem with two prices. Show the answer, and explain the mental math strategy you would use to solve it.

1. 26
2. 22
3. 33
4. 43
5. Yes. Counting 19 as 20 take away 1 gives 41¢ for the two together, so she would have 7¢ left. Any named strategy counts, so long as the child says which one they used.
6. 12¢, because he spent 27¢ altogether.
7. It is close. The exact answer is 43¢, which is 3¢ more than her estimate.
8. A) Take 30¢, then add 1 back
9. A) Yes, they cost 39¢
10. Answers will vary. Check that two prices and an amount of money are given, that the total is correct, and that the strategy named is a real one such as using a friendly number, counting on, or making a ten.

TEACHER NOTES

Extension beyond the grade-level expectation: Part B question 2 runs the purchase backwards from the money left to a missing price, and question 3 asks students to judge somebody else's estimate. Part C question 1 is marked qualitative because the answer is a strategy rather than a number.