Situation A. Student Strategies

Casey's Strategy

To compute the total cost of an item that costs $8.95 with a 5% sales tax, I multiply $8.95 by 0.05 and then add the tax to the $8.95.

8.95 • 0.05 + 8.95

Sammi's Strategy

Multiply $8.95 by 1.05.

That will get the whole amount (100% or 1) and the tax (5% or 0.05).

$$\frac{8.95}{100} = \frac{x}{105}$$

×1.05 ×1.05

Vanessa's Strategy

I used the Distributive Property. I think this strategy will work for any bill.

0.05 • 8.95 + 1 • 8.95 =
(0.05 + 1) • 8.95

or

1.05 • 8.95 to find the total bill.

Alex's Strategy

I first find 1%. Then I can find any percent, like the 105% needed for this question.

$$\frac{8.95}{100} = \frac{0.0895}{1} = \frac{x}{105}$$

÷100 ×105 ÷100 ×105

Ash's Strategy

I used a percent bar or tape diagram. Extend the bar to find 105%.