Smarter Balanced Assessment Item Illustrating 4.OA.A.2

Which situation can be represented by the equation $3 \times 4 = \square$?

A. A kitten weighs 4 pounds. A puppy weighs 3 times as much as the kitten. How much does the puppy weigh?

B. A kitten weighs 4 pounds. A puppy weighs 3 times as much as the kitten. How much do they weigh altogether?

C. A kitten weighs 4 pounds. A puppy weighs 3 pounds more than the kitten. How much do they weigh altogether?

D. A kitten weighs 4 pounds. A puppy weighs 3 pounds more than the kitten. How much does the puppy weigh?

Answer Key

A

Elaboration on Alignment

This example illustrates some of the important work that younger students should be doing with mathematical modeling. As stated in the text for MP4, "In early grades, this (applying mathematics to solve problems) might be as simple as writing an addition equation to describe a situation." As students progress through the grades, the equations they write become increasingly more complex as do the scenarios they are modeling. Younger students should spend plenty of time thinking about the numbers in an equation and what they represent, should be given opportunities to create equations given a scenario, and should learn that sometimes there is more than one correct equation that can represent the same scenario.

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