Grade 7 Equation Word Problems: Define the Variable First

Worked example / complete source key

A school store sells notebooks for 4 dollars each and charges a one-time 7-dollar fee for a bulk order. A class spends 35 dollars. How many notebooks did the class order? Define the variable, write an equation, and solve.

Answer: Let n be the number of notebooks. The cost is 4n + 7 dollars, which equals 35 dollars. So 4n + 7 = 35. Subtract 7 from both sides: 4n = 28. Divide both sides by 4: n = 7. Check: 4 times 7 is 28, and 28 plus 7 is 35, which matches the total. The class ordered 7 notebooks.