Name _____

Practice
4-1

Properties of Equality

1. If $16 + 4 = 20$, does $16 + 4 - 4 = 20 - 4$? Why or why not?

2. If $2d \div 4 = 5$, does $2d \div 4 + 6 = 5 + 4$? Why or why not?

3. If $12 - 8 = 4$, does $(12 - 8) \div 2 = 4 \times 2$? Explain.

4. If $7t = 70$, does $12 \times 7t = 12 \times 70$? Explain.

5. Critical Thinking Emil and Jade have equal amounts of play money in two piles. Emil has $1 and a quarter in his pile. Jade has 5 quarters in her pile. If Emil gives Jade $1 and Jade gives Emil 4 quarters, will the two piles still be equal in value? Explain.

6. Which equation shows the Multiplication Property of Equality if $n + 4 = 11$?

A $(n + 4) \times 2 = 11$

B $(n + 4) \times 2 = 11 \div 2$

C $(n + 4) \times 2 = 11 \times 4$

D $(n + 4) \times 2 = 11 \times 2$

7. Writing to Explain Bobbie wrote $y + 6 = 15$. Then she wrote $(y + 6) \div 3 = 15$. Explain why the second equation is not balanced and how to balance it.