Multiplying and dividing rational expressions

Name _____ Date _____

1. $\frac{x^2 - 10x + 9}{x + 7} \times \frac{x + 7}{x^2 - 17x + 72} =$ _____

2. $\frac{x^2 - 3x + 2}{x - 9} \div \frac{x - 2}{x + 8} =$ _____

3. $\frac{x^2 - 9x + 8}{x - 5} \div \frac{x - 1}{x - 9} =$ _____

4. $\frac{x^2 - 14x + 48}{x - 5} \div \frac{x - 8}{x + 9} =$ _____

5. $\frac{x^2 + 3x - 18}{x - 9} \times \frac{x - 9}{x^2 - 9x + 18} =$ _____

6. $\frac{x^2 - 7x - 18}{x + 9} \times \frac{x + 9}{x^2 - 3x - 54} =$ _____

7. $\frac{x^2 + 11x + 24}{x - 8} \times \frac{x - 8}{x^2 + 10x + 16} =$ _____

8. $\frac{x^2 + 7x + 10}{x - 9} \div \frac{x + 2}{x - 7} =$ _____

Multiplying and dividing rational expressions

9. $\frac{x^2 + 7x - 8}{x - 6} \times \frac{x - 6}{x^2 - 3x + 2} =$ _____

10. $\frac{x^2 + x - 72}{x - 4} \div \frac{x + 9}{x + 4} =$ _____

11. $\frac{x^2 - 8x + 7}{x - 5} \div \frac{x - 7}{x + 2} =$ _____

12. $\frac{x^2 + 13x + 40}{x + 4} \div \frac{x + 8}{x - 7} =$ _____

13. $\frac{x^2 - 13x + 36}{x + 5} \div \frac{x - 4}{x - 8} =$ _____

14. $\frac{x^2 + 13x + 42}{x - 8} \div \frac{x + 7}{x + 9} =$ _____

15. $\frac{x^2 + 4x - 32}{x + 7} \div \frac{x + 8}{x + 9} =$ _____

16. $\frac{x^2 - 10x + 21}{x + 4} \times \frac{x + 4}{x^2 + 2x - 63} =$ _____

17. $\frac{x^2 + 2x - 15}{x - 6} \div \frac{x - 3}{x - 9} =$ _____