

Review Fractions and Factoring

Simplify the following fractions. Do not use a calculator. Show ALL of your work.

1. $\frac{11}{12} + \frac{4}{3}$

2. $\frac{13}{7} - \frac{9}{7}$

3. $\frac{10}{7} \cdot \frac{1}{2}$

4. $\frac{14}{13} \div 2$

5. $\frac{3}{2} - \frac{1}{4}$

6. $\frac{10}{11} \cdot \frac{13}{8}$

7. $\frac{1}{4} \div \frac{5}{4}$

8. $\frac{3}{9} + \frac{1}{6}$

9. $\frac{5}{3} - \frac{2}{7}$

Factor.

10. $4x^2 - 12x^3$

11. $x^2 + 6x + 8$

12. $5x^2 + 13x + 6$

13. $8x^3 - 125$

14. $x^2 - 13x + 40$

15. $64x^3 + 27$

16. $4x^2 - 25$

17. $3x^2 - 5x - 12$

18. $5x^2 - 5x - 100$