Questions

1. Solve for x when $9(x+3)-6=24-2x-3+11x$.

2. Solve $\dfrac{6}{x-5}+\dfrac{3x+1}{x^2-2x-15}=\dfrac{5}{x+3}$.

3. Reduce $\left|\frac{2}{5}x+1\right|=|1-x|$.

4. Solve $\dfrac{1}{R}=\dfrac{1}{R_1}+\dfrac{1}{R_2}+\dfrac{1}{R_3}$ for R_1 (resistance).

5. In her statistics course, Jill earned 80/100 and 75/100 on her two chapter tests. The chapter tests count 30% each towards her course grade, and the final exam is worth 40% of her course grade. What must Jill score on the final (out of 100) if she wishes to earn a final grade of at least 83/100?