**Challenge Problems**

1) $\frac{\frac{x^{2}-9}{x}}{\frac{x+3}{5}}$ 2) $\frac{7+\frac{1}{y}}{x-y}$

3) $\frac{\frac{2}{a}-\frac{3}{b}}{\frac{5}{b}-\frac{6}{a^{2}}}$ 4) $\frac{4x}{3x^{2}(x+2)}+\frac{1}{9(x^{2}-4)}$

5) $\frac{1}{6x^{4}-3x^{3}-63x^{2}}-\frac{x}{36x^{2}-126x}$ 6) $\frac{\frac{1}{x}+\frac{x}{x^{2}-1}}{\frac{1}{x}-\frac{x}{x^{2}+1}}$

7) Solve for $f:$ 8) $\frac{n+7}{\left(2n-2\right)+7}=\frac{4}{5}$

$$\frac{1}{f}+\frac{1}{p}=\frac{1}{q}$$

9) Bethany has scored 10 free throws out of 18 tries. She would really like to bring her free throw average up to at least 68%. How many consecutive free throws should she score in order to bring up her average to 68%?

10) 