The following problems represent the absolute minimum knowledge necessary to have a chance of successful completion of **Math 238 (Business Calculus)**. If you are unable to answer these problems, you are strongly advised to take the course indicated for the material.

Minimum necessary knowledge from Intermediate Algebra or Accelerated Elementary/Intermediate Algebra (Math 125 or Math 134)

1. Find the slope-intercept equation of the line that has a slope of -5 and goes through the point $(-1, 4)$

2. Solve the equation $x^2 - 6x - 27 = 0$

3. Subtract the rational expressions $\dfrac{3}{x+4} - \dfrac{1}{2x(x+4)}$

4. Simplify the expression $\dfrac{x^{-5}y^4}{x^{-7}y^{-8}}$ using only positive exponents

5. Rewrite the expression $\sqrt[5]{x}$ using rational exponents

6. Solve the equation $5^{-2t} = 0.42$

7. Let $f(x) = \dfrac{x+4}{x-5}$. For what values of x is $f(x) = 0$ and for what values of x is $f(x)$ undefined?