Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Use factoring to solve the equation  $2x^3 + 7x^2 - 15x = 0$ .

2. Perform the following operations and simplify

(a) 
$$\frac{a^2-2a+4}{a^3+8} \cdot \frac{(a+2)^3}{2a+4}$$

(b) 
$$\frac{4x-2}{x^2-5x} \div \frac{2x^2+9x-5}{x^2-25}$$