

Show all work for problems 4–8; use the back of the sheet if necessary.

1. **(1 points)** Express the interval $(-2, 5]$ in terms of inequalities.
2. **(1 points)** Express the inequality $x \geq 6$ in interval notation.
3. **(2 points)** Evaluate the expression $(-8)^{4/3}$.
4. **(3 points)** Expand the polynomial $2x^3 - (x^2 - 4x)(x + 3)$.
5. **(3 points)** Simplify the rational expression $\frac{\frac{x+1}{x^2}}{\frac{2x}{x-1}}$.
6. **(3 points)** Using any method you like, solve the equation $x^2 + 3x - 4 = 0$.
7. **(4 points)** A job pays \$8 per hour for the standard 40 hours worked per week; for time beyond that 40 hours, it pays \$12 per hour. If you earn \$380 at this job in a particular week, how many hours of overtime did you work?
8. **(3 points)** Find an equation, in any of the standard line-equation forms you like, for the line passing through the point $(-1, 3)$ which is parallel to the line $y = -2x + 4$.