Solve the equations.

1. $8-\frac{5}{x}=2+ \frac{3}{x}$ 2. (3x-2)2 = (x-5)(9x+4)
2. $\sqrt[5]{2x^{2}+1}-2=0$ 4. 6x2 + x – 12 = 0
3. x2 + 6x + 7 = 0

Write the expression in the form of a+bi.

1. (1-3i)(2+5i) 7. $\frac{3}{2+4i}$

Solve the inequality and express the solutions in terms of intervals when possible.

1. -2 – 3x ≥ 2 9. $3\leq \frac{2x-3}{5}<7$