### 5.6 Practice Problems

1. Use the graph of the polynomial function to solve the inequalities.
a. $\quad f(x) \geq 0$
b. $\quad f(x)<0$

2. Use the graph of the rational function to solve the inequalities.
a. $\quad f(x) \geq 0$


Solve the following inequalities. Write your answer in interval notation.
3. $(x+1)(x-2)(x+4)>0$
4. $x^{3}+7 \mathrm{x}^{2}-x-7<0$
5. $\frac{3-x}{x+8}>0$
6. $\frac{2 x-3}{3 x-7} \leqslant 0$
7. $2 x^{2}+4 x+1<0$
8. $x^{2}+6 x+9 \leq 0$
9. $\frac{x-3}{x+8} \leq 2$
10. $9-x^{2}<0$

