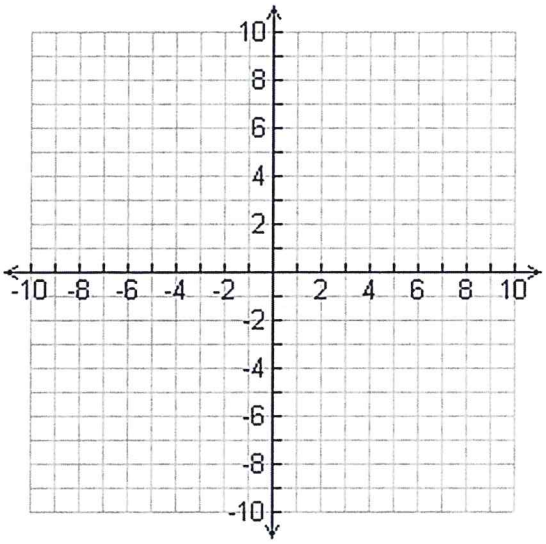
**Graphing on the Coordinate Plane**

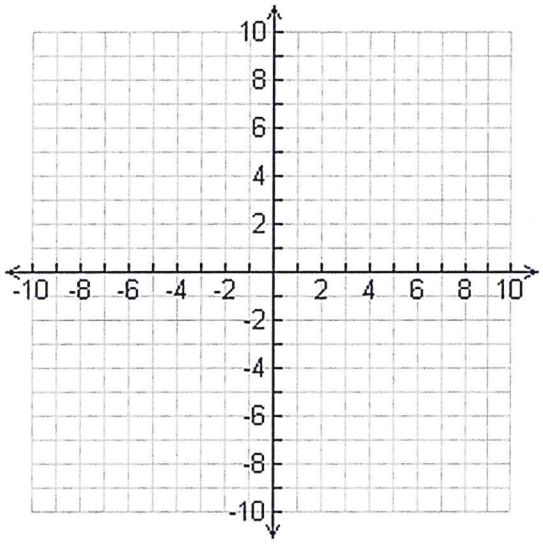
Emphasis on Rational Functions

**Graph each of the following Rational Functions identifying any holes, vertical/horizontal asymptotes:**

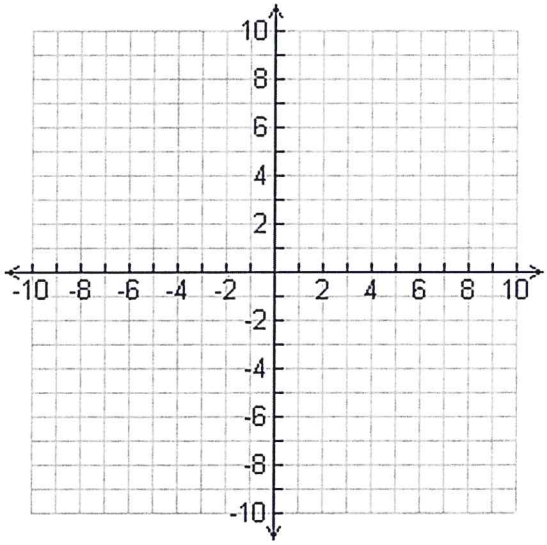
1. $f(x) = \frac{x+4}{-2x-6}$



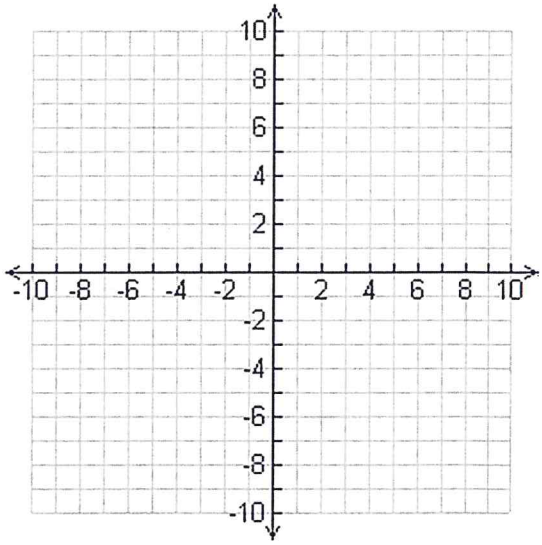

2. $f(x) = \frac{x+2}{2x+6}$



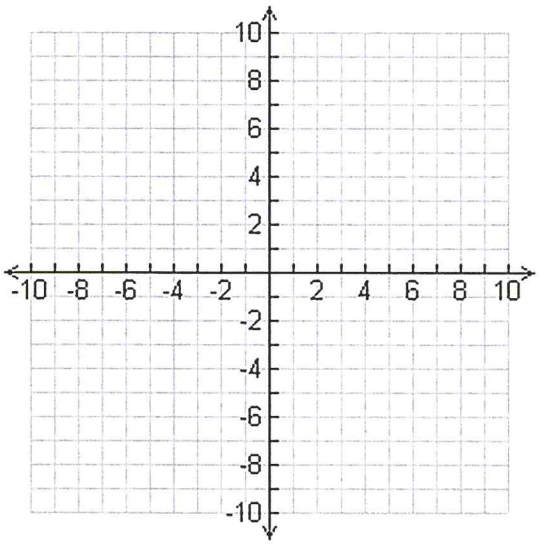

3. $f(x) = \frac{3}{x-2}$



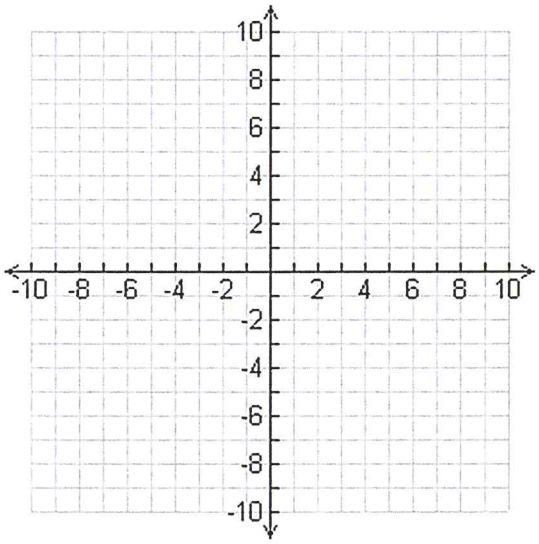

4. $f(x) = \frac{-5}{x+4}$



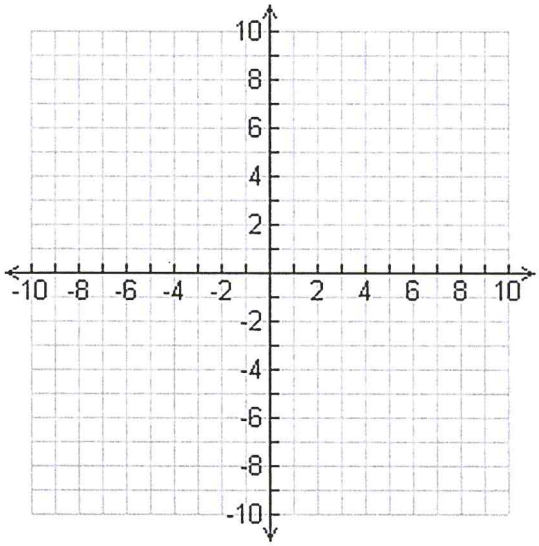
5. $f(x) = \frac{2x^2+10x+12}{x^2+3x+2}$

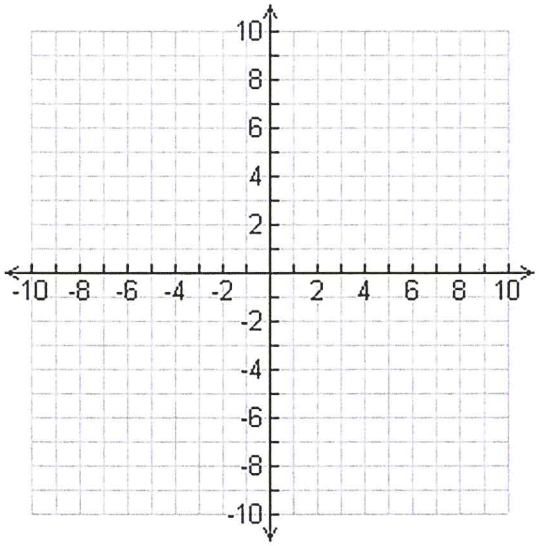



6. $f(x) = \frac{x^2+4x-5}{x^2+9x+20}$




7. $f(x) = \frac{x^2-9}{x+3}$




8. $f(x) = \frac{x+6}{2x^2+9x-18}$