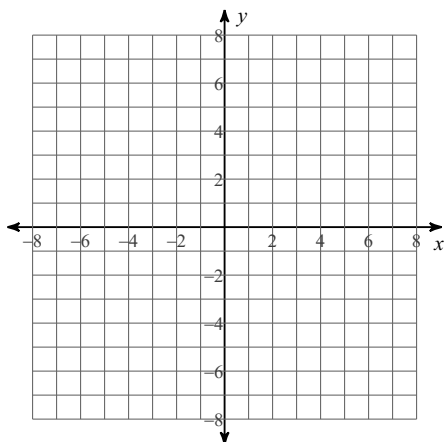


SM3-A HW 4-8 (Review)

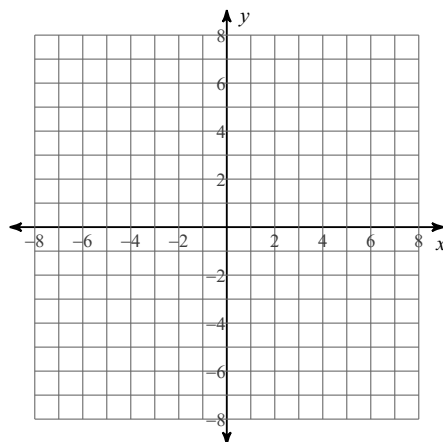
Date _____ Period _____

Identify the holes, vertical asymptotes, x-intercepts, and horizontal asymptote of each. Then sketch the graph.

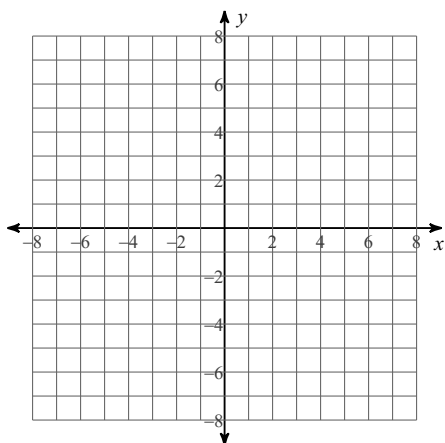
1) $f(x) = -\frac{4}{x-1}$



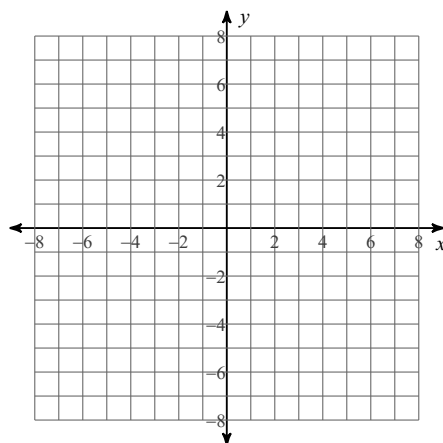
2) $f(x) = -\frac{2x}{x+3}$



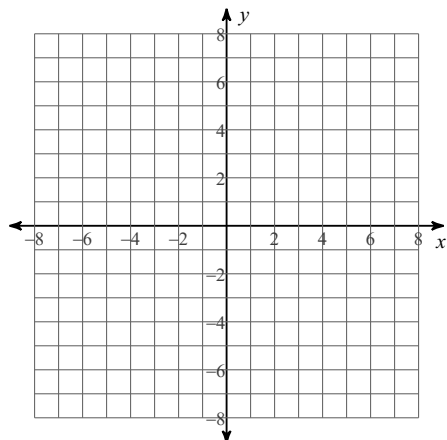
3) $f(x) = \frac{-3x-9}{x+2}$



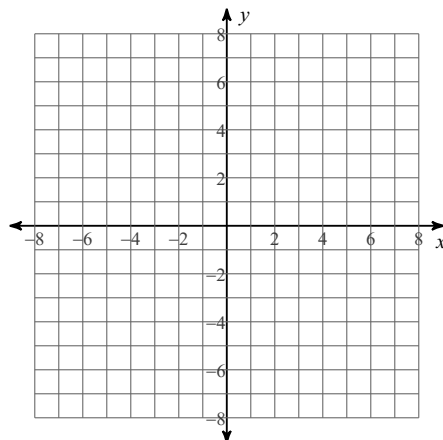
4) $f(x) = \frac{3x-3}{x+1}$



$$5) f(x) = -\frac{2}{x-4}$$



$$6) f(x) = \frac{4}{x+3}$$



Simplify each expression.

$$7) \frac{3r}{r-5} - \frac{r-6}{r-2}$$

$$8) \frac{5}{b-1} + \frac{6}{b-5}$$

$$9) \frac{x-9}{6} \div \frac{x+3}{6x+18}$$

$$10) \frac{a+6}{7a+42} \div \frac{a+6}{a^2+5a-6}$$

$$11) \frac{a^2-16a+60}{10-a} \cdot \frac{1}{60a}$$

$$12) \frac{1}{x-5} \cdot \frac{15-3x}{x^2+2x-80}$$