Identify the points of discontinuity, holes, vertical asymptotes, x-intercepts, and horizontal asymptote of each.

1) $f(x)=\dfrac{1}{3x^2+3x-18}$

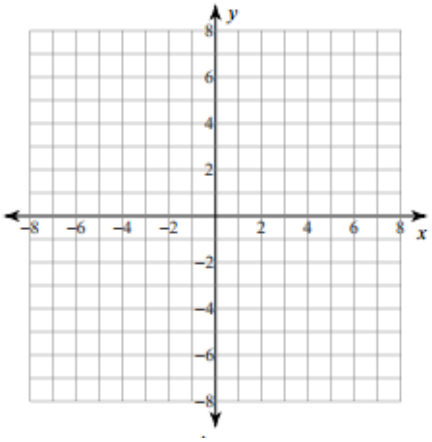
2) $f(x)=\dfrac{x-2}{x-4}$

3) $f(x)=\dfrac{x^3-x^2-6x}{-3x^2-3x+18}$

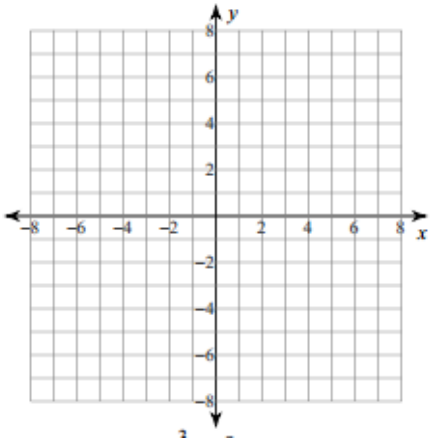
4) $f(x)=\dfrac{x^2+x-6}{-4x^2-16x-12}$

Identify the points of discontinuity, holes, vertical asymptotes, and horizontal asymptote of each. Then sketch the graph.

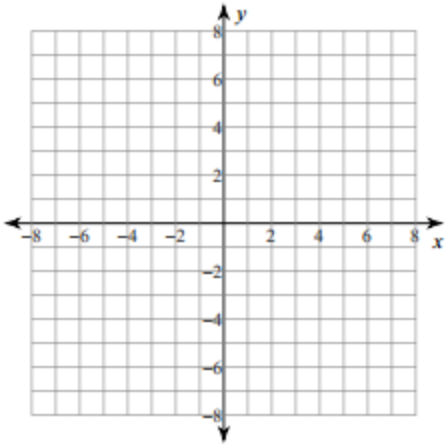
5) $f(x)=-\dfrac{4}{x^2-3x}$



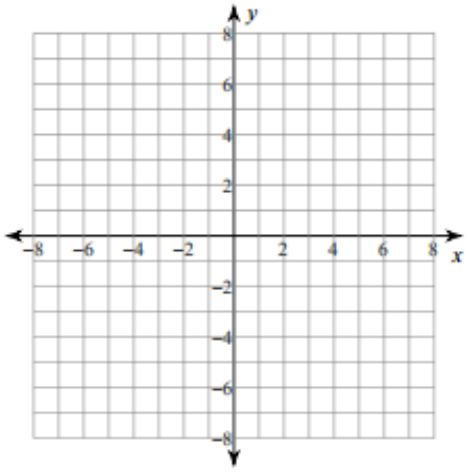
6) $f(x)=\dfrac{x-4}{-4x-16}$



7) $f(x)=\dfrac{x+4}{-2x-6}$



8) $f(x)=\dfrac{2x^2+10x+12}{x^2+3x+2}$



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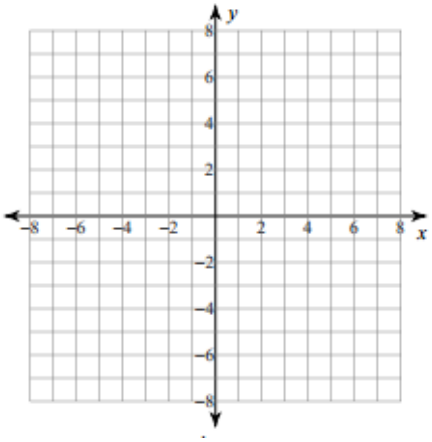

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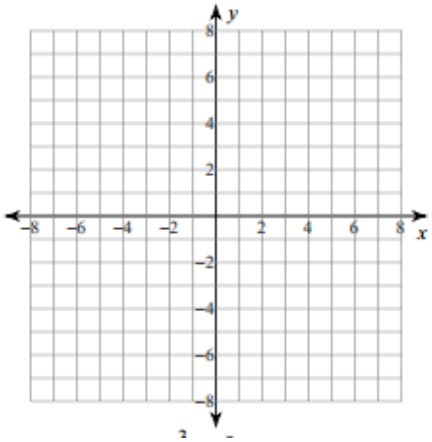

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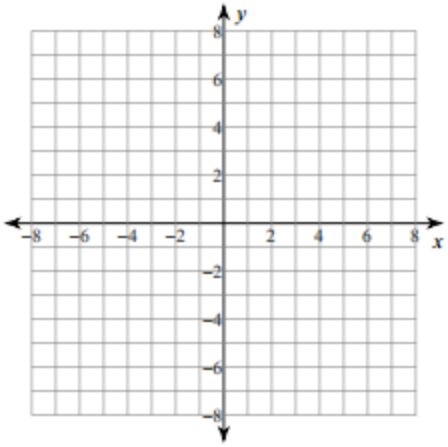

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