

1. Find the following for  $f(x) =$

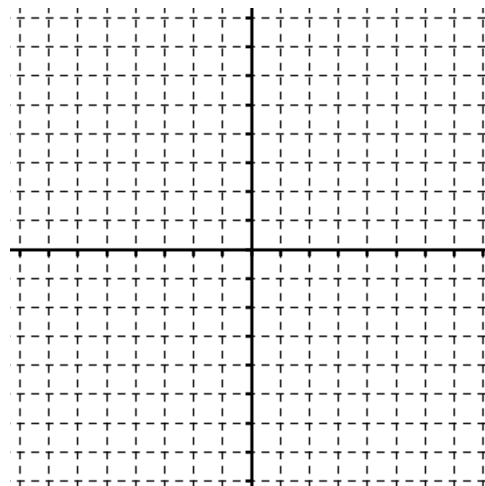
and graph the function.

- a. Domain \_\_\_\_\_
- b. Vertical Asymptote(s) \_\_\_\_\_
- c.  $x$ -intercept(s) \_\_\_\_\_
- d.  $y$ -intercept \_\_\_\_\_
- e. End Behavior Asymptote \_\_\_\_\_
- f. Analyze the end behavior using limit notation

$$\lim_{x \rightarrow -\infty} f(x) = \underline{\hspace{2cm}} \quad \lim_{x \rightarrow \infty} f(x) = \underline{\hspace{2cm}}$$

- g. Analyze the behavior near each vertical asymptote using limit notation.

$$\lim_{x \rightarrow \underline{\hspace{1cm}}} f(x) = \underline{\hspace{2cm}} \quad \lim_{x \rightarrow \underline{\hspace{1cm}}} f(x) = \underline{\hspace{2cm}} \quad \lim_{x \rightarrow \underline{\hspace{1cm}}} f(x) = \underline{\hspace{2cm}} \quad \lim_{x \rightarrow \underline{\hspace{1cm}}} f(x) = \underline{\hspace{2cm}}$$



2. Find the following for  $f(x) =$

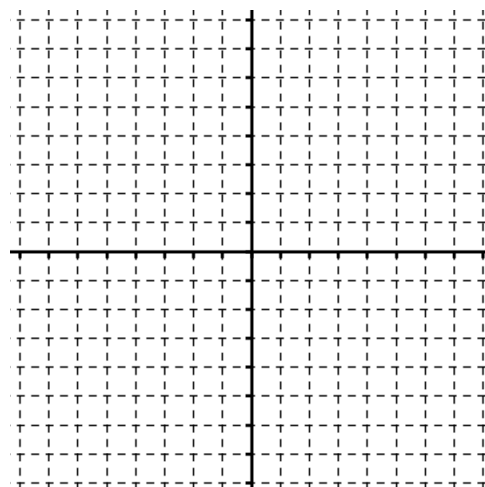
and graph the function.

- a. Domain \_\_\_\_\_
- b. Vertical Asymptote(s) \_\_\_\_\_
- c.  $x$ -intercept(s) \_\_\_\_\_
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3. Find the following for  $f(x) =$

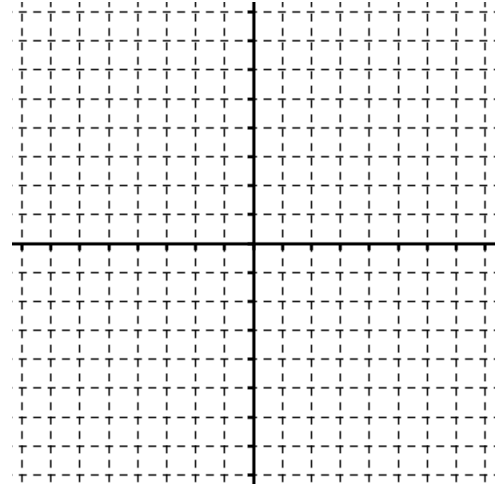
and graph the function.

- a. Domain \_\_\_\_\_
- b. Vertical Asymptote(s) \_\_\_\_\_
- c.  $x$ -intercept(s) \_\_\_\_\_
- d.  $y$ -intercept \_\_\_\_\_
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4. Find the following for  $f(x) =$

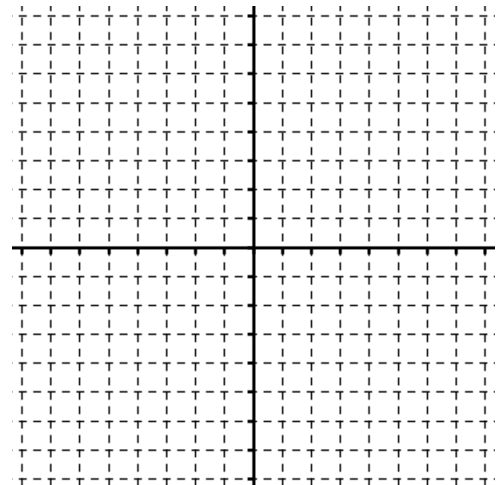
and graph the function.

- a. Domain \_\_\_\_\_
- b. Vertical Asymptote(s) \_\_\_\_\_
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5. Find the following for  $f(x) =$

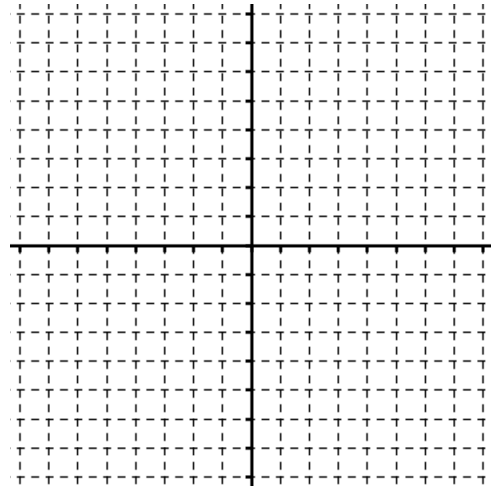
and graph the function.

- a. Domain \_\_\_\_\_
- b. Vertical Asymptote(s) \_\_\_\_\_
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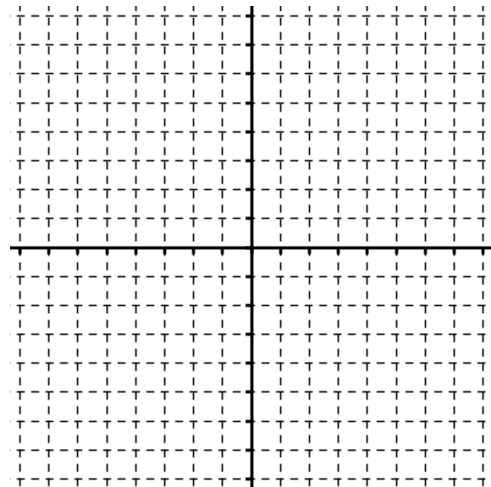
and graph the function.

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- b. Vertical Asymptote(s) \_\_\_\_\_
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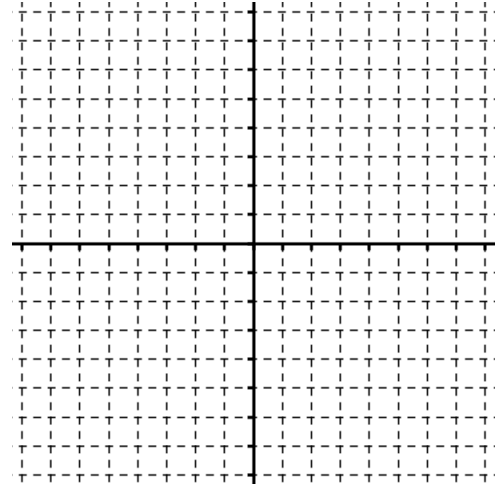
and graph the function.

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