

## 5.4 Oblique Asymptotes

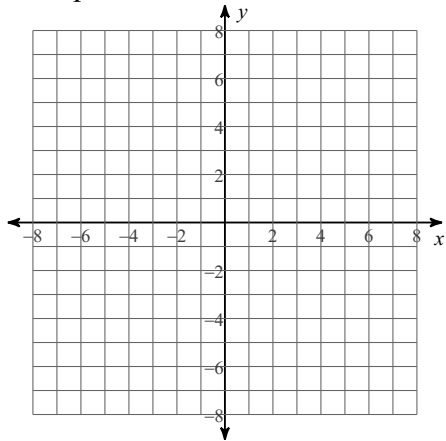
Find the VA, holes and the equation of the oblique asymptote. Sketch the graph of the function.

$$1) f(x) = \frac{x^2 - 7}{x}$$

VA:

Holes:

Oblique:

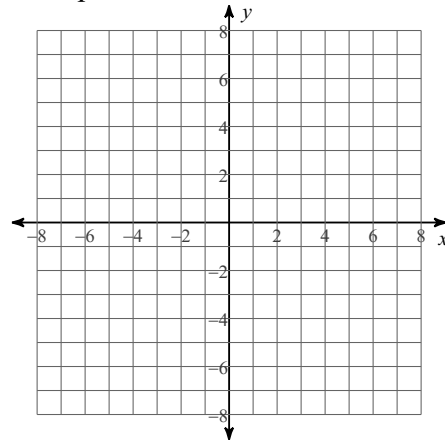


$$2) f(x) = \frac{x^2 + x + 6}{2x}$$

VA:

Holes:

Oblique:

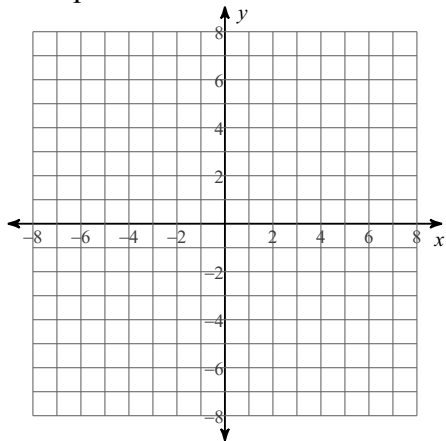


$$3) f(x) = \frac{x^2 + 8x + 5}{x + 1}$$

VA:

Holes:

Oblique:

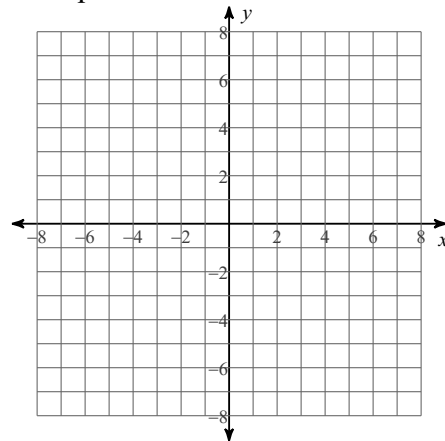


$$4) f(x) = \frac{x^2 - 5x}{x - 5}$$

VA:

Holes:

Oblique:

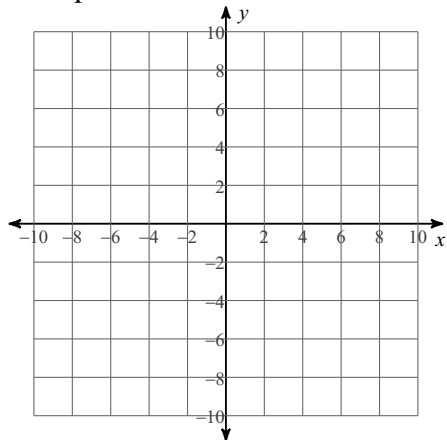


$$5) f(x) = \frac{x^2 + 2x + 1}{x + 3}$$

VA:

Holes:

Oblique:

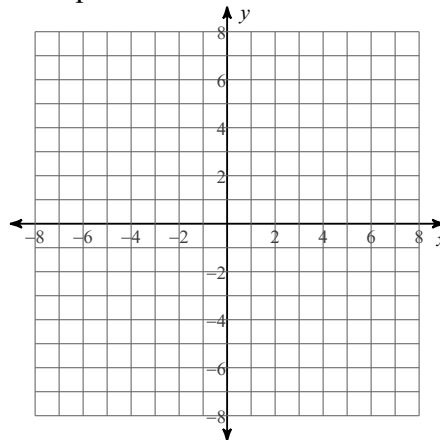


$$6) f(x) = \frac{x^2 + 3x - 5}{x + 2}$$

VA:

Holes:

Oblique:

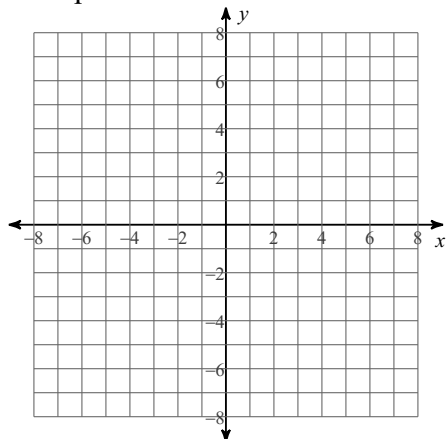


$$7) f(x) = \frac{x^2 - x - 5}{x + 2}$$

VA:

Holes:

Oblique:

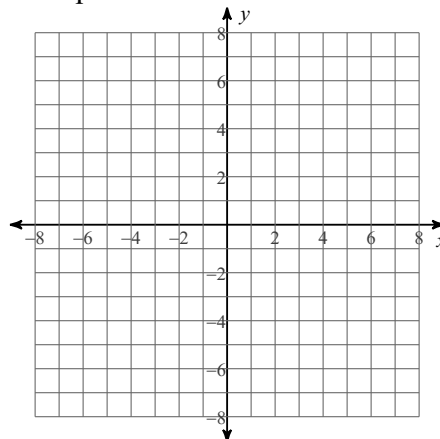


$$8) f(x) = \frac{x^2 - 2x + 1}{x}$$

VA:

Holes:

Oblique:

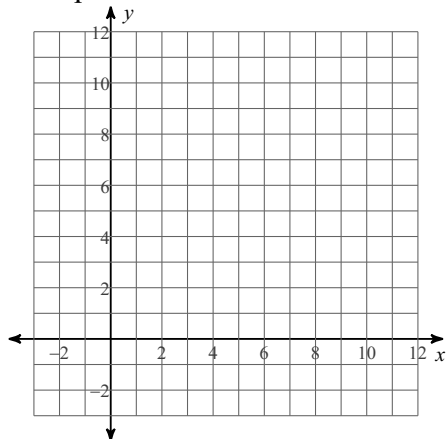


$$9) f(x) = \frac{2x^2 - 15x + 27}{x - 5}$$

VA:

Holes:

Oblique:



$$10) f(x) = \frac{x^2 - x - 12}{x - 4}$$

VA:

Holes:

Oblique:

