

1. Solve the rational equation below.

$$\frac{6x}{-3x+4} + \frac{-7x^2}{-6x^2-13x+28} = \frac{2}{2x+7}$$

2. Determine the domain of the function below.

$$f(x) = \frac{4}{25x^2 - 9}$$

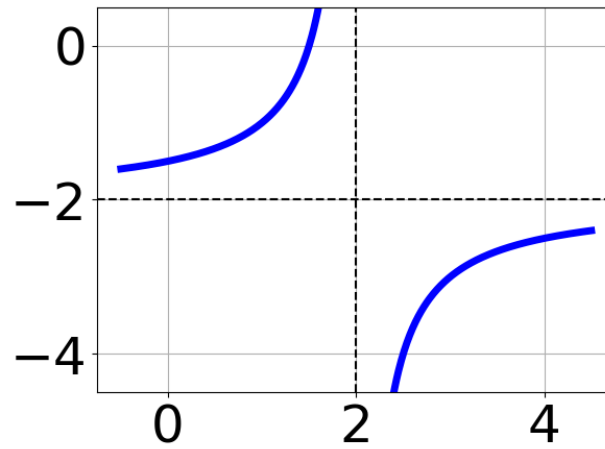
3. Solve the rational equation below.

$$\frac{3}{-9x - 2} + -3 = \frac{-4}{81x + 18}$$

4. Solve the rational equation below.

$$\frac{36}{24x - 108} + 1 = \frac{36}{24x - 108}$$

5. Write an equation that can represent the function graphed below.



6. Sketch a graph that represents the equation below.

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

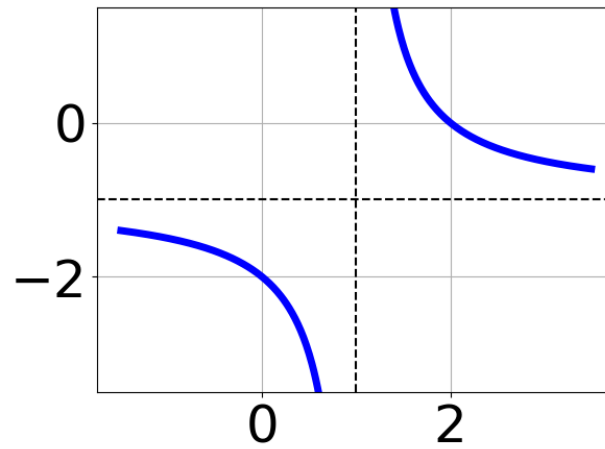
7. Determine the domain of the function below.

$$f(x) = \frac{5}{30x^2 - 30}$$

8. Solve the rational equation below.

$$\frac{4x}{2x+5} + \frac{-7x^2}{4x^2+16x+15} = \frac{3}{2x+3}$$

9. Write an equation that can represent the function graphed below.



10. Sketch a graph that represents the equation below.

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

11. Solve the rational equation below.

$$\frac{-4x}{-2x+7} + \frac{-3x^2}{-14x^2+35x+49} = \frac{3}{7x+7}$$

12. Determine the domain of the function below.

$$f(x) = \frac{4}{25x^2 - 5x - 12}$$

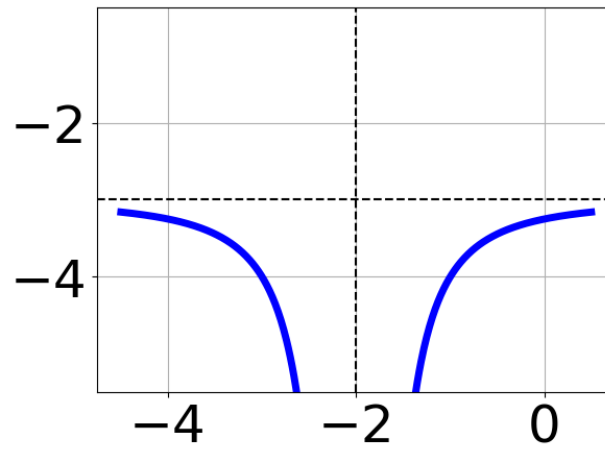
13. Solve the rational equation below.

$$\frac{3}{8x+7} + 5 = \frac{3}{-32x-28}$$

14. Solve the rational equation below.

$$\frac{-98}{-42x + 42} + 1 = \frac{-98}{-42x + 42}$$

15. Write an equation that can represent the function graphed below.



16. Sketch a graph that represents the equation below.

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

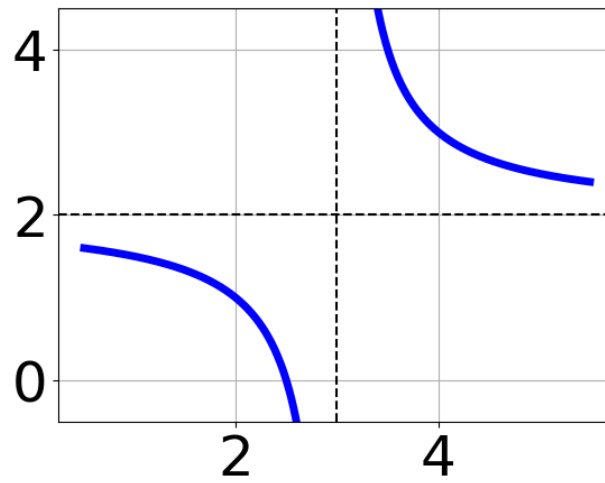
17. Determine the domain of the function below.

$$f(x) = \frac{4}{9x^2 - 27x + 20}$$

18. Solve the rational equation below.

$$\frac{-2x}{-6x+5} + \frac{-5x^2}{30x^2-43x+15} = \frac{-4}{-5x+3}$$

19. Write an equation that can represent the function graphed below.



20. Sketch a graph that represents the equation below.

$$f(x) = \frac{1}{x-2} - 3$$

21. Solve the rational equation below.

$$\frac{7x}{3x+7} + \frac{-6x^2}{15x^2+44x+21} = \frac{-6}{5x+3}$$

22. Determine the domain of the function below.

$$f(x) = \frac{6}{15x^2 + 43x + 30}$$

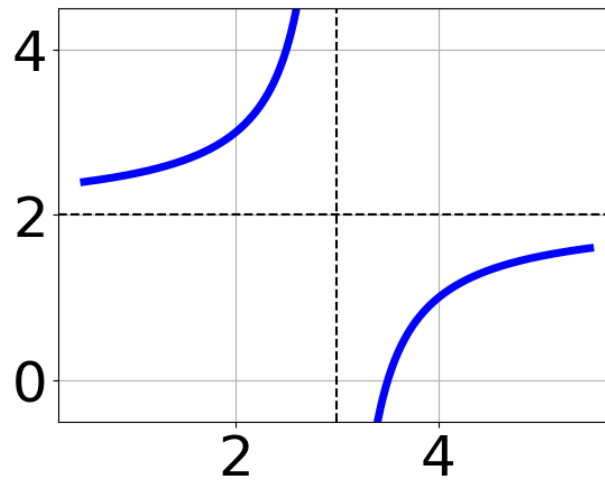
23. Solve the rational equation below.

$$\frac{63}{-56x + 28} + 1 = \frac{63}{-56x + 28}$$

24. Solve the rational equation below.

$$\frac{2}{-6x + 9} + 3 = \frac{4}{18x - 27}$$

25. Write an equation that can represent the function graphed below.



26. Sketch a graph that represents the equation below.

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

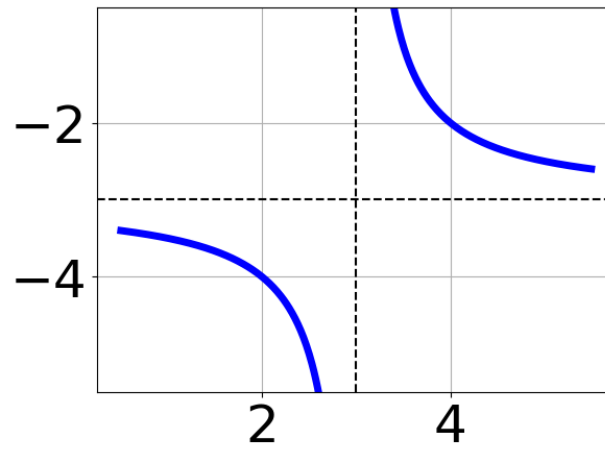
27. Determine the domain of the function below.

$$f(x) = \frac{3}{20x^2 + 3x - 9}$$

28. Solve the rational equation below.

$$\frac{-5x}{-3x-5} + \frac{-4x^2}{-9x^2-24x-15} = \frac{5}{3x+3}$$

29. Write an equation that can represent the function graphed below.



30. Sketch a graph that represents the equation below.

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