

$$6. \quad x = 1, y = 5$$

$$y = \frac{5}{x}; -\frac{5}{3}$$

$$7. \quad x = -4, y = -6$$

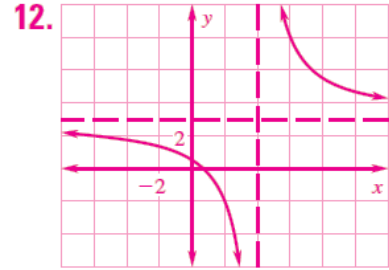
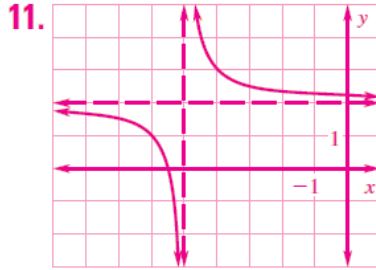
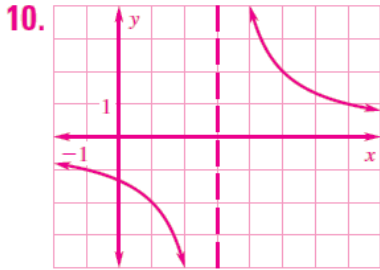
$$y = \frac{24}{x}; -8$$

$$8. \quad x = \frac{5}{2}, y = 18$$

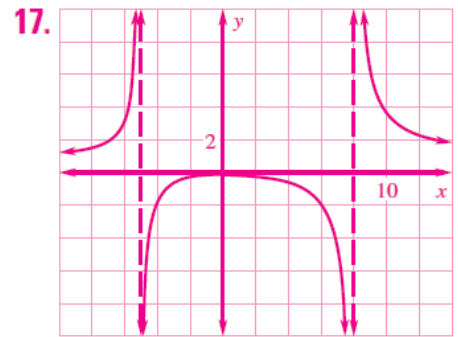
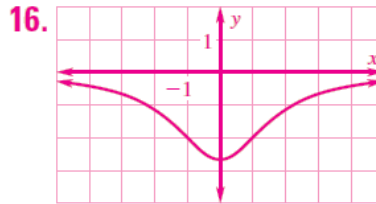
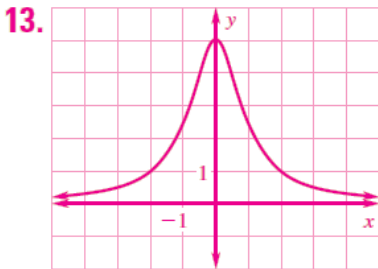
$$y = \frac{45}{x}; -15$$

$$9. \quad x = -12, y = \frac{2}{3}$$

$$y = \frac{-8}{x}; \frac{8}{3}$$



domain: all real numbers except 3 domain: all real numbers except -5 domain: all real numbers except 4



$$19. \quad \frac{80x^4}{y^3} \cdot \frac{xy}{5x^2} = \frac{16x^3}{y^2}$$

$$20. \quad \frac{x-3}{2x-8} \cdot \frac{6x^2-96}{x^2-9} = \frac{3(x+4)}{x+3}$$

$$21. \quad \frac{16x^2-8x+1}{x^3-7x^2+12x} \div \frac{20x^2-5x}{15x^3} = \frac{3x(4x-1)}{(x-4)(x-3)}$$

$$22. \quad \frac{x^2-13x+40}{x^2-2x-15} \div (x^2-5x-24) = \frac{1}{(x+3)^2}$$

$$23. \quad \frac{3x^2+26x+36}{6x(x+3)}$$

$$24. \quad \frac{5x^2-11x-9}{(x+8)(x-3)}$$

$$25. \quad \frac{-2(2x^2+3x+3)}{(x-3)(x+3)(x+1)}$$

$$26. \quad \frac{2x}{9} = \frac{2}{x} \quad \pm 3$$

$$27. \quad \frac{5}{x} = \frac{7}{x+2} \quad 5$$

$$28. \quad \frac{x-1}{4} = \frac{3x}{9} \quad -3$$

$$29. \quad \frac{2}{x+2} = \frac{6}{2x+5} \quad -1$$

$$30. \quad \frac{x+12}{3} = \frac{2x+3}{x+2} \quad -5, -3$$

$$31. \quad \frac{2x}{x+4} = \frac{-3x}{4x-3}$$

$$-\frac{6}{11}, 0$$

$$32. \quad \frac{5}{2} + \frac{3}{x} = 3 \quad 6$$

$$33. \quad \frac{8(x-1)}{x^2-4} = \frac{4}{x+2} \quad 0$$

$$34. \quad \frac{3x}{x+1} = \frac{12}{x^2-1} + 2 \quad -2, 5$$

$$35. \quad \frac{2(x+7)}{x+4} - 2 = \frac{2x+20}{2x+8} \quad \text{no solution}$$