**3.** $\frac{2x}{3x-4}, x \neq 0$

**4.** $\frac{7x-1}{2x}$

**5.** $\frac{x+3}{x-1}, x \neq 6$

**6.** simplified form

**7.** $\frac{x+9}{x^2-2x+4}, x \neq -2$

**8.** $\frac{x-4}{x^2+3x+9}, x \neq 3$

**9.** $\frac{2(4x^2+5)}{x-3}, x \neq \pm\sqrt{\frac{5}{4}}$

**10.** $\frac{x-1}{3(3x^2-7)}$

**11.** $\frac{y^3}{2x^2}, y \neq 0$

**12.** $\frac{8x^4}{y^2}, x \neq 0$

**13.** $\frac{(x-4)(x+6)}{x}, x \neq 3$

**14.** $\frac{(x+5)(x+8)}{3}, x \neq 0, x \neq 9$

**15.** $(x-3)(x+3), x \neq 0, x \neq 2$

**16.** $\frac{(x-4)(x+4)}{2}, x \neq 0, x \neq 1$

**17.** $\frac{2x(x+4)}{(x+2)(x-3)}, x \neq 1$

**18.** $\frac{(x-3)(x+1)}{2x^2(x+3)}, x \neq -2$

**19.** $\frac{(x+9)(x-4)^2}{(x+7)}, x \neq 7$

**20.** $(x+3)(x-2), x \neq -4, x \neq 4$

**21.** The polynomials need to be factored first, and then the common factors can divide out; $\frac{x+12}{x+4}$

**22.** The expression $3-x$ should be factored into $-(x-3)$ before dividing out the common factor; $-(x-5)$ or $5-x$, $x \neq 3, x \neq -5$

**23.** B

**24.** $\frac{y^5}{x^3}$; *Sample answer:* Multiplying the numerators and denominators before simplifying was faster because you only have to simplify the expression once.