Day 2 HW

Tuesday, January 27, 2015 10:17 AM

- p. 812: 50-70 even

(50) $\frac{1}{y}$ (52) $\frac{y^2+4y}{y-1}$ (54) $\frac{x^2}{2y^2}$ (56) $\frac{3}{8}$ (58) $-2x$ (60) $\frac{x+4}{x-2}$

(62) $\frac{-2x^2-x+10}{x^3+3x^2-4x-12}$ (64) $\frac{1}{y-x}$ (66) $2x-3$ (68) $\frac{2}{x^2+xh+4x+2h+4}$ OR $\frac{2}{(x+2)(x+h+2)}$

(70) $\frac{1}{b-a}$

soutions

(50) $\frac{y(y^2+2y+4)}{y^2(y+2)} \cdot \frac{(y+2)(y-2)}{(y-2)(y^2+2y+4)} = \boxed{\frac{1}{y}}$

(52) $\frac{(y+4)(y+4)}{(3y+2)(y-1)} \cdot \frac{y(3y+2)}{(y+4)} = \boxed{\frac{y(y+4)}{y-1}}$

(54) $\frac{4x}{y} \cdot \frac{x}{8y} = \frac{4x^2}{8y^2} = \boxed{\frac{x^2}{2y^2}}$

(56) $\frac{7(x-y)}{4y} \cdot \frac{3y}{14(x-y)} = \boxed{\frac{3}{8}}$

(58) $\frac{(x+y)(x-y)}{2xy} \cdot \frac{4x^2y}{(y-x)(y+x)} = \frac{2x(x-y)}{(-x+y)} = \frac{2x(x-y)}{-(x-y)} = \boxed{-2x}$

(60) $\frac{3}{x-2} + \frac{x+1}{x-2} = \boxed{\frac{x+4}{x-2}}$

(62) $\frac{5}{(x+3)(x-2)(x+2)}\frac{(x+2)}{} - \frac{2(x+2)(x+3)}{(x-2)(x+2)(x+3)} + \frac{4}{(x+2)(x-2)(x+3)}\frac{(x+3)}{}$

$\frac{5(x+2)-2(x^2+5x+6)+4x+12}{(x+3)(x^2-4)}$

$\frac{5x+10-2x^2-10x-12+4x+12}{x^3+3x^2-4x-12}$

$\boxed{\frac{-2x^2-x+10}{x^3+3x^2-4x-12}}$

(64) $\frac{y+x}{xy} \cdot \frac{x^2y^2}{y^2-x^2}$

$\frac{y+x}{(y+x)(y-x)} = \boxed{\frac{1}{y-x}}$

(66) $\frac{2x+10-13}{x+5} \cdot \frac{x-3}{2x-6} = \frac{2x-3}{x+5} \cdot \frac{x-3}{2(x-3)} = \boxed{\frac{2x-3}{2x+10}}$

a) $\boxed{\frac{x-3}{2(x-3)}}$ b − a

(68) $\frac{(x+2)(x+h)-x(x+h+2)}{(x+2)(x+h+2)} \cdot \frac{1}{h} = \frac{x^2+xh+2x+2h-x^2-xh-2x}{(x+2)(x+h+2)} \cdot \frac{1}{h}$

$= \frac{2h}{x^2+xh+2x+2x+2h+4} \cdot \frac{1}{h} = \frac{2}{x^2+xh+4x+2h+4}$

(70) $\frac{a+b}{ab} \cdot \frac{ab}{b^2-a^2} = \frac{a+b}{(b-a)(b+a)}$