R 2.1

25.

$$6[x-(2x+3)]=8-5x$$

$$6[x-2x-3]=8-5x$$

$$6[-x-3]=8-5x$$

$$-6x-18=8-5x \quad (+6x,\ -8,\ -8)$$

$$-26=x$$

29.

$$\frac{3}{2}(z+5)-\frac{1}{4}(z+24)=0$$

$$\frac{3}{2}z+\frac{15}{2}-\frac{1}{4}z-6=0$$

$$\frac{5}{4}z+\frac{3}{2}=0 \qquad -\frac{3}{2} \qquad -\frac{3}{2} \qquad \frac{12}{2}$$

$$\frac{4}{5}\cdot\frac{5}{4}z=-\frac{3}{2}\cdot\frac{4}{5}$$

$$z=-\frac{6}{5}$$

37. $\dfrac{5x-4}{5x+4} = \dfrac{2}{3}$

$10x + 8 = 15x - 12$

$-10x \quad +12 \qquad -10x \quad +12$

$\dfrac{20}{5} = \dfrac{5x}{5}$

$4 = x$

41 $\frac{1}{x-3} + \frac{1}{x+3} = \frac{10}{x^2-9}$

$\frac{x+3}{(x+3)(x-3)} + \frac{x-3}{(x+3)(x-3)} = \frac{10}{(x+3)(x-3)}$

$(x+3)(x-3)\left[\frac{2x}{(x+3)(x-3)} = \frac{10}{(x+3)(x-3)}\right](x+3)(x-3)$

$2x = 10$

$\frac{2x}{2} = \frac{10}{2}$

$x = 5$

45. $\frac{7}{2x+1} - \frac{8x}{2x-1} = -4$

$\frac{7(2x-1)}{(2x+1)(2x-1)} - \frac{8x(2x+1)}{(2x+1)(2x-1)} = -4$

$\frac{14x-7}{(2x+1)(2x-1)} - \frac{16x^2+8x}{(2x+1)(2x-1)} = -4$

$(2x+1)(2x-1)$

$\frac{-16x^2+6x-7}{(2x+1)(2x-1)} = \frac{-4}{1}$ $(2x+1)(2x-1)$

$+16x^2 \quad +7 \qquad +16x^2 \quad +7$

$-16x^2+6x-7 = -16x^2+4$

$\frac{6x}{6} = \frac{11}{6}$

$x = \frac{11}{6}$

49.

$$(x+2)^2 + 5 = (x+3)^2$$

$$(x+2)(x+2) + 5 = (x+3)(x+3)$$

$$x^2+4x+4 + 5 = x^2+6x+9$$

$$x^2+4x+9 = x^2+6x+9$$

$$-x^2 \quad -4x \quad -9 \quad -x^2 \quad -4x \quad -9$$

$$\frac{0}{2} = \frac{2x}{2}$$

$$0 = x$$

R2.2

R87

1. x , $x+1$

Ex 5 , 6

$x + (x+1)$

Sum is 25

2. x

$25-x$

$x(25-x)$

$10 + 15 = 25$

$25 - 10$

$12 + 13 = 25$

$25 - 12$

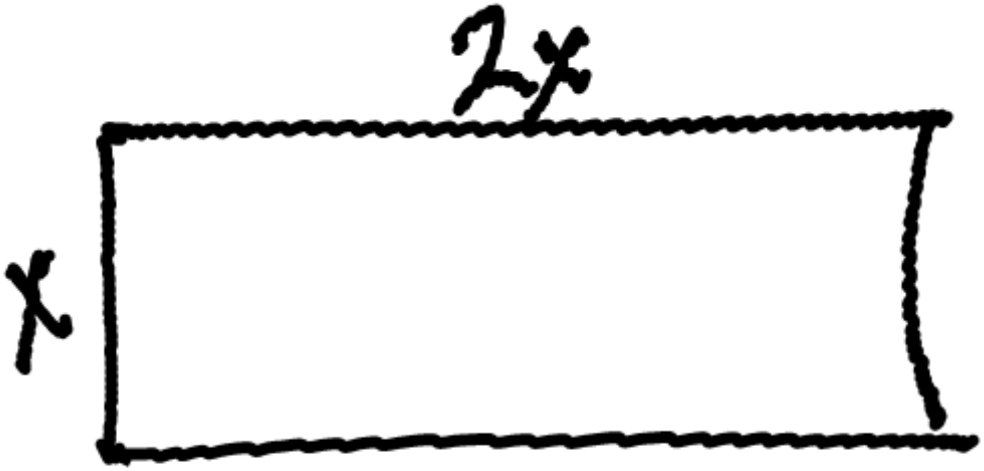
$20 + 5 = 25$

$25 - 20$

$x + \quad = 25$

$25 - x$

7.



$P = 2l + 2w$

$P = 2(2x) + 2(x)$

$P = 4x + 2x$

$P = 6x$

13.

x

$5x$

$5x - x = 148$

$\frac{4x}{4} = \frac{148}{4}$

$x = 37$