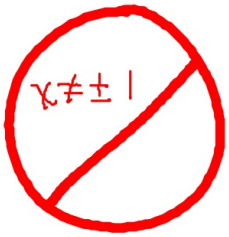
p. 558 even ans.

#18 $\dfrac{x^2+4x-3}{(x+1)(x-1)}$ $x \neq \pm 1$

#20 $\dfrac{5x^2+6x+12}{(x-3)(x+2)^2}$ $x \neq 3$, $x \neq -2$

#22 $\dfrac{3(4y-21)}{y(y-7)}$ $y \neq 0$, $y \neq 7$



#18 $\dfrac{3}{x+1} + \dfrac{x}{x-1}$

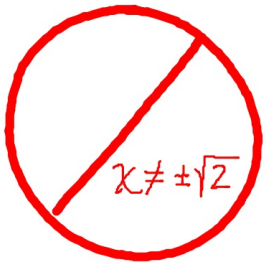
LCM: $(x+1)(x-1)$

$\dfrac{3}{x+1} \cdot \dfrac{x-1}{x-1} + \dfrac{x}{x-1} \cdot \dfrac{x+1}{x+1}$

$\dfrac{3x-3+x^2+x}{(x+1)(x-1)}$

$\dfrac{x^2+4x-3}{(x+1)(x-1)}$

#21 $\dfrac{3x}{1} + \dfrac{x^2+5x}{x^2-2}$



$x^2-2=0$

$x^2=2$

$x=\pm\sqrt{2}$

$$\frac{3x}{1}\cdot\frac{x^2-2}{x^2-2} + \frac{x^2+5x}{x^2-2}$$

$$\frac{3x^3-6x+x^2+5x}{x^2-2}$$

$$\frac{3x^3+x^2-x}{x^2-2}$$

#22 $\dfrac{5y}{y^2-7y} - \dfrac{4}{2y-14} + \dfrac{9}{y}$

$$\frac{5y}{y(y-7)} - \frac{4}{2(y-7)} + \frac{9}{y}$$

LCM: $2y(y-7)$

$$\frac{5y}{y(y-7)}\cdot\frac{2}{2} - \frac{4}{2(y-7)}\cdot\frac{y}{y} + \frac{9}{y}\cdot\frac{2(y-7)}{2(y-7)}$$

$5 \quad 18 \quad 7 \quad 126$

$$\frac{10y-4y+18y-126}{2y(y-7)}$$

$$\frac{24y-126}{2y(y-7)}$$

$$\frac{12y-63}{y(y-7)} = \frac{3(4y-21)}{y(y-7)}$$

p. 562 #4

$$\frac{1-\frac{1}{4}}{2-\frac{3}{5}}$$

$$\frac{\frac{3}{4}}{\frac{7}{5}}$$

$$\frac{3}{4} \cdot \frac{5}{7} = \frac{15}{28}$$