

$$34. \text{ LCM: } 2x(x-5) \quad \frac{2x(x-5)}{1} \cdot \frac{7}{x(x-5)} + \frac{2x(x-5)}{1} \cdot \frac{2}{x} = \frac{2x(x-5)}{1} \cdot \frac{3}{2(x-5)}$$

$$2 \cdot 7 + 4(x-5) = 3x$$

$$14 + 4x - 20 = 3x$$

$$4x - 6 = 3x$$

$$-6 = -x$$

$$x = 6$$

$$35. \text{ LCM: } (x+4)(x-4)(x-1)$$

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

$$(x-4)(x+3) = (x+2)(x-1)$$

$$x^2 + 3x - 4x - 12 = x^2 - x + 2x - 2$$

$$x^2 - x - 12 = x^2 + x - 2$$

$$\begin{array}{r} -x^2 \\ -x - 12 = x - 2 \\ +x \quad +x \end{array}$$

$$\begin{array}{r} -12 = 2x - 2 \\ +2 \quad +2 \end{array}$$

$$2x = -10$$

$$x = -5$$

Extra Quiz Practice:

17. LCM: $(x+3)(x-3)$ Ans: $x = -9$ 19. Just cross multiply; Ans $x = 11$

21. LCM: 30 Ans: $x = 5$ 22. Cross multiply; $x = -3$ 24. LCM: $5x$ Ans $x = \frac{7}{2}$

25. Cross multiply: $x = -3$ 26. Cross multiply; $x = 18$ 27. LCM: 8 Ans $x = \frac{60}{7}$

30. LCM: 6; $x = 12$ 31. LCM: 6 $x = 4$