

Pg 154. 24-50 EVEN

$$24. \frac{2}{3}x + 4 = \frac{3}{5}x - 2$$

$$\frac{2}{3}x + 4 + 2 = \frac{3}{5}x - 2 + 2$$

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

$$6 = \frac{3}{5}x - \frac{2}{3}x$$

$$15(6) = \left(\frac{15}{5}\right)\frac{3}{5}x - 15\left(\frac{2}{3}\right)x$$

$$90 = 9x - 10x$$

$$\frac{90}{-1} = \frac{-x}{-1}$$

$$-90 = x$$

$$26. 3(n-4) = -\frac{1}{2}(24-6h)$$

$$3n - 12 = \frac{-1}{2}(24) - \frac{1}{2}(-6h)$$

$$3h - 12 = -12 + 3h$$

$$3h - 12 = 3h - 12$$

IDENTITY

$$28. 8n = 16 + 6n$$

$$8n - 6n = 16 + 6n - 6n$$

$$\frac{2n}{2} = \frac{16}{2}$$

$$n = 8$$

$$30. ax + bx = -c$$

$$x(a+b) = -c$$

$$\frac{x(a+b)}{(a+b)} = \frac{-c}{(a+b)}$$

$$x = \frac{-c}{(a+b)}$$

$$x = \frac{-c}{a+b}$$

$$32. m - 3x = 2x + p$$

$$m - 3x - 2x = 2x + p - 2x$$

$$m - 5x = p$$

$$m - m - 5x = p - m$$

$$\frac{-5x}{-5} = \frac{p-m}{-5}$$

$$x = \frac{p-m}{-5}$$

$$\text{or } \frac{m-p}{5}$$

$$34. a = lw$$

$$220 = 5.5w$$

$$\frac{220}{5.5} = \frac{5.5w}{5.5}$$

$$40cm = w$$

36. TRIANGLE HEIGHT 15 IN
 AREA OF 120 IN
 WHAT IS LENGTH OF BASE

$$A = \frac{1}{2}bh$$

$$2 \cdot 120 = \frac{1}{2}b \cdot 15 \cdot 2$$

$$\frac{240}{15} = \frac{b \cdot 15}{15}$$

$$16 = b$$

38. 4 lbs 7 oz to oz

$$\frac{4 \text{ lb}}{1} \cdot \frac{16 \text{ oz}}{1 \text{ lb}} = \frac{64}{1}$$

$$\frac{64 \text{ oz} + 7 \text{ oz}}{71 \text{ oz}}$$

40. 2.25 mi: yd

$$\frac{2.25 \text{ mi}}{1} \cdot \frac{5280 \text{ ft}}{1 \text{ mi}} \cdot \frac{1 \text{ yd}}{3 \text{ ft}}$$

$$\frac{11880}{3} = 3960 \text{ yds}$$

42. $\frac{1}{4}$ oz TO YEAR.

$$\frac{.25 \text{ oz}}{\text{Day}} \cdot \frac{365 \text{ day}}{1 \text{ yr}} \cdot \frac{1 \text{ lb}}{16 \text{ oz}}$$

$$\frac{91.25}{16} = 5.7$$

$$\approx 6 \text{ lb/yr}$$

44. $\frac{3}{7} = \frac{9}{x}$

$$\frac{3x}{3} = \frac{63}{3}$$

$$x = 21$$

48. $\frac{b+3}{7} = \frac{b-3}{6}$

$$6(b+3) = 7(b-3)$$

$$6b+18 = 7b-21$$

$$6b-b+18 = 7b-6b-21$$

$$+21+18 = b-21+21$$

$$39 = b$$

50. $\frac{25}{15} = \frac{20}{x}$

$$25x = 20 \cdot 15$$

$$\frac{25x}{25} = \frac{300}{25}$$

$$x = 12 \text{ w.}$$