

①  $4(4x-1) = 16$   
 $16x - 4 = 16$   
 $16x = 20$   
 $x = \frac{20}{16} = \frac{5}{4}$

②  $6x + 5(3x-6) = -1 - 8x$   
 $6x + 15x - 30 = -1 - 8x$   
 $21x - 30 = -1 - 8x$   
 $29x - 30 = -1$   
 $29x = 29$   
 $x = 1$

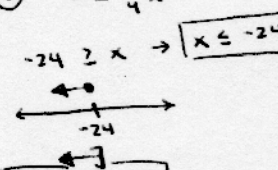
③  $1.1x + 2.2 = 0.4x + 1.92$   
 $0.7x + 2.2 = 1.92$   
 $0.7x = -0.28$   
 $x = -0.4$

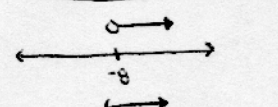
④  $\frac{1}{5}x - \frac{1}{5} = -5$   
 $x - 1 = -25$   
 $x = -24$

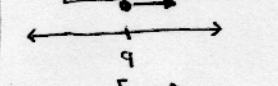
⑤  $\frac{1}{3}x + 2 = \frac{1}{6}x + \frac{4}{3}$   
 $2x + 12 = x + 8$   
 $x + 12 = 8$   
 $x = -4$

⑥  $V = \frac{1}{3}Ah$   
 $3V = Ah$   
 $A = \frac{3V}{h}$

⑦  $5x - 7y = 13$   
 $-7y = 13 - 5x$   
 $y = \frac{13 - 5x}{-7}$   
 $y = -\frac{(13 - 5x)}{7}$   
 $y = \frac{-13 + 5x}{7}$

⑧  $-6 \geq \frac{1}{4}x$   
 $-24 \geq x \rightarrow x \leq -24$   
  
 $(-\infty, -24]$


⑨  $15x - 27 > 3(4x - 17)$   
 $15x - 27 > 12x - 51$   
 $3x - 27 > -51$   
 $3x > -24$   
 $x > -8$   
 $(-8, \infty)$   



⑩  $-20x + 16 \leq -4(4x + 5)$   
 $-20x + 16 \leq -16x - 20$   
 $-4x + 16 \leq -20$   
 $-4x \leq -36$   
 $x \geq 9$   
 $[9, \infty)$   


⑪  $A = \frac{1}{2}bh$

⑫  $A = l \cdot w$

⑬  $p = 2l + 2w$

⑭  $L = 3 + 2w$   
 $p = 210$   
  
 $L = 3 + 2w$   
 $p = 210$   
 $p = 2l + 2w$   
 $210 = 2(3 + 2w) + 2w$   
 $210 = 6 + 4w + 2w$   
 $210 = 6 + 6w$   
 $204 = 6w$   
 $w = 34 \text{ feet}$   
 $L = 3 + 2(34)$   
 $L = 71 \text{ feet}$

⑮  $31 \sqrt{217} = 7 \text{ gallons of paint}$   
  
 $119 \times 119$   
 $1323 \text{ Square ft.}$


⑯  $I = prt$   
 $I = 1600$   
 $p = ?$   
 $r = 18\% = .18$   
 $t = 15$   
 $1600 = p(.18)(15)$   
 $1600 = p(2.7)$

$p = \frac{1600}{2.7} = \$593 \text{ (round nearest dollar)}$

⑰  $\$240(-.85) = \$204$

or  
 $240 - 240(.15) = 240 - 36 = \$204$

⑱  $\text{new} = 3000$   $\text{old} = 7000$   
 $\% \text{ change} = \frac{\text{new} - \text{old}}{\text{old}} \times 100 = \frac{3000 - 7000}{7000} = \frac{-4000}{7000} = -\frac{4}{7} = 57.1\%$

⑲  $A = l \cdot w$   
  
 $l = \frac{4}{13}$   
 $A = \left(\frac{1}{2}\right)\left(\frac{4}{13}\right) = \frac{4}{26} = \frac{2}{13} \text{ ft.}^2 \text{ or } 54 \text{ ft.}^2$

⑳  $A = \frac{1}{2}bh$   $b = 3\frac{4}{5}$   $h = 5\frac{2}{3}$   
 $A = \frac{1}{2}\left(3\frac{4}{5}\right)\left(5\frac{2}{3}\right) = \frac{323}{30} \text{ cm.}^2$

㉑  $I = p_1 r_1 t + p_2 r_2 t$   
 $p_1 = x$   $p_2 = 3x$   $t = 1$   $I = 7200$   
 $r_1 = .03$   $r_2 = .05x$   
 $7200 = .03x + .05(3x)$   
 $7200 = .03x + .15x$   
 $7200 = .18x$   
 $x = 40000$   
