

4)  $x = \frac{c}{a} - b$  or  $x = \frac{c-ab}{a}$ , 3.5

5)  $x = bc - a$ , 9

6)  $x = \frac{ab}{c}$ , 3

9) Should be  $-b$ . 12)  $y = \frac{10-5x}{4}$

14)  $y = 9x - 13$

16)  $y = \frac{-8x+5}{-8}$  or  $\frac{8x-5}{8}$

18)  $y = \frac{-8+6x}{-4}$  or  $\frac{8-6x}{4}$  or  $\frac{4-3x}{2}$

20)  $w = \frac{V}{lh}$  22)  $f = \frac{l}{24}$

24)  $y = 2.1x - 8.4$

26)  $y = \frac{3x-15}{-6}$  or  $\frac{-3x-15}{6}$  or  $\frac{-x-5}{2}$

27)  $\ell = \frac{S-\pi r^2}{\pi r}$  or  $\frac{S}{\pi r} - r$ , 13.03 cm

28)  $p = \frac{A}{4\pi w}$ , 8.01 ft

32) a:  $n = \frac{d+2}{4}$  b: 1.75 in, 3.5 in, 4.5 in, 5.5 in

33) a:  $x = \frac{C-25}{12}$  b: 10, 13, 15

34) a:  $x = \frac{P-2\pi r}{2}$  b:

r	x
50	173
51	169.86
52	166.72
53	163.58

c:

35) percent =  $\frac{\text{tip}}{\text{bill}} \times 100\%$

36) a:  $r = \frac{C}{2\pi}$  b: 1.1 ft, 1.3 ft, 1.4 ft

37)  $g = \frac{11r}{4}$

5)  $C = \frac{x+a}{b}$

$2 = \frac{x+5}{7}$

$bc = x+a$   
 $bc-a = x+a-a$   
 $bc-a = x$

$c=2$   
 $b=7$   
 $a=5$

$x = bc - a$   
 $= 7(2) - 5$   
 $= 14 - 5 = 9$   
 $\{9\}$

8)  $ax+b = cx-d$   
 $ax-cx+b = cx-cx-d$   
 $ax-cx+b = -d$   
 $ax-cx+b-b = -d-b$   
 $ax-cx = -b-d$   
 $x(a-c) = \frac{-b-d}{a-c}$   
 $x = \frac{-b-d}{a-c}$

$3(x-y)$   
 $3x-3y$

6)  $\left(\frac{x}{a} = \frac{b}{c}\right) \cdot a$   
 $x = \frac{ab}{c}$

14)  $18x-2y=26$   
 $18x-18x-2y=26-18x$   
 $\frac{-2y}{-2} = \frac{26-18x}{-2}$   
 $y = \frac{26-18x}{-2}$   
 reduce by -2  
 $y = -13+9x$

18)  $3+6x = 11-4y$   
 $3-11+6x = 11-11-4y$   
 $\frac{-8+6x}{-4} = \frac{-4y}{-4}$   
 reduce by -2  
 $\frac{4-3x}{2} = y$   
 or  
 $\frac{4}{2} - \frac{3}{2}x = y$   
 $2 - \frac{3}{2}x = y$

20)  $V = \frac{lw}{lh} \cdot h$   
 $\frac{V}{lh} = w$

26)  $8x-5x+21 = 36-6y$   
 $3x+21 = 36-6y$   
 $3x+21-36 = 36-36-6y$   
 reduce by -3  
 $\frac{3x-15}{-6} = \frac{-6y}{-6}$   
 $\frac{-x+5}{2} = y$

34)  $P = 2\pi r + 2x$  b:  $\frac{660-2\pi(50)}{2}$   
 $P - 2\pi r = 2\pi r - 2\pi r + 2x$   
 $\frac{P-2\pi r}{2} = \frac{2x}{2}$   
 $\frac{P-2\pi r}{2} = x$

$\frac{660-2\pi(50)}{2}$   
 $\vdots$

36 a:  $\frac{C}{2\pi} = \frac{2\pi r}{2\pi}$   
 $\frac{C}{2\pi} = r$

c:  $A = \pi r^2$   
 $A = \pi \left(\frac{C}{2\pi}\right)^2$

$$27) S = \pi r l + \pi r^2$$

$$S - \pi r^2 = \pi r l + \pi r^2 - \pi r^2$$

$$\frac{S - \pi r^2}{\pi r} = \frac{\pi r l}{\pi r}$$

$$\frac{S - \pi r^2}{\pi r} = l$$

$$\frac{283 - \pi 5^2}{5(\pi)} = l$$

$$28) A = \frac{4\pi r w}{4\pi w}$$

$$\frac{A}{4\pi w} = P$$

$$\frac{905}{4(3.14)(9)} = P$$