

#112 28-32 even 38, 40, 45, 46, 47

28. $C = 2\pi r$

$$\frac{22}{2\pi} = \frac{2\pi r}{2\pi}$$

$$\frac{22}{2(3.14)} = r$$

$$3.5 = r$$

30. $h = 4$

$$\text{Area} = 32$$

$$a = \frac{1}{2}lw$$

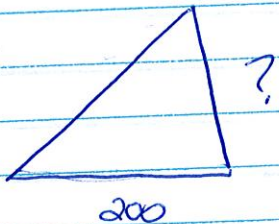
$$2 \cdot 32 = \frac{1}{2}lh \cdot 2$$

$$64 = lh$$

$$64 = \frac{l(4)}{4}$$

$$16 = l$$

32



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

$$\text{area} = 7500$$

$$2 \cdot 7500 = \frac{1}{2}(200 \times h) \cdot 2$$

$$\frac{15000}{200} = \frac{200h}{200}$$

$$75 = h$$

38. $ax + 2xy = 14$

solve for y.

$$ax + 2xy = 14$$

$$-ax \quad -ax$$

$$\frac{2xy}{2x} = \frac{14 - ax}{2x}$$

$$y = \frac{14 - ax}{2x}$$

40. $A = \left(\frac{f+g}{2}\right)h$

solve for g

$$\frac{A}{h} = \left(\frac{f+g}{2}\right)\frac{h}{h}$$

$$2 \cdot \frac{A}{h} = \frac{f+g}{2} \cdot 2$$

$$2A = f+g$$

$$-f \quad -f$$

$$\frac{2A - f}{h} = g$$

$$45. \begin{array}{l} 2m = -6m + 3 \\ 2m + 3 = -6m \\ \frac{2m+3}{-6} = n \end{array}$$

3 was added
to the left side
of equation instead
of subtracting

$$\begin{array}{l} 2m - 3 = -6m \\ \frac{2m-3}{-6} = n \end{array}$$

$$46. \quad V = \pi r^2 h$$

$$\begin{array}{l} 502 = (3.14)(4^2)h \\ 502 = (3.14)(16)h \\ \frac{502}{50.24} = \frac{(50.24)h}{50.24} \end{array}$$

$$\begin{array}{l} 9.99 = h \\ 10 \approx h \end{array}$$

$$47. \quad D = \frac{m}{V}$$

$$V \cdot 19.3 = \frac{96.5}{V} \cdot V$$

$$\frac{19.3V}{19.3} = \frac{96.5}{19.3}$$

$$V = 5 \text{ cm}^3$$