Literal Equations

Name _____

(1) Solve for n

$L = a + (n-1)d$

(2) Solve for S

$D = \frac{C-S}{n}$

(3) Solve for h

$V = \frac{1}{3}\pi r^2 h$

(4) Solve for r

$V = \frac{1}{3}\pi r^2 h$

(5) Solve for v

$$h = vt - 16t^2$$

(6) Solve for c

$$A = \frac{b+c+d+e}{4}$$

(7) Solve for π

$$A = 2\pi r^2 + 2\pi rh$$

(8) Solve for r

$$V = \frac{1}{3}\pi h^2(3r - h)$$

Literal Equations Name _____

① Solve for n

$$L = a + (n-1)d$$

$$-a \quad -a$$

$$\frac{L-a}{d} = \frac{(n-1)\cdot d}{d}$$

$$\frac{L-a}{d} = n-1$$

$$+1 \quad +1$$

$$\boxed{\frac{L-a}{d} + 1 = n}$$

② Solve for S

$$n \cdot D = \frac{C-S}{n} \cdot n$$

$$nD = C - S$$

$$-C \quad -C$$

$$nD - C = -S$$

$$\boxed{C - n\cdot D = S}$$

③ Solve for h

$$\frac{V}{\pi} = \frac{\frac{1}{3}\cdot\pi\cdot r^2\cdot h}{\pi}$$

$$\frac{3}{1}\cdot\frac{V}{\pi} \quad \frac{3}{3}\cdot r^2\cdot h$$

$$\frac{1}{r^2}\cdot\frac{3V}{\pi} \quad \frac{1}{r^2}\cdot r^2\cdot h$$

$$\boxed{\frac{3V}{r^2\cdot\pi} = h}$$

④ Solve for r

$$\frac{V}{\pi} = \frac{\frac{1}{3}\pi r^2 h}{\pi}$$

$$\frac{3}{1}\cdot\frac{V}{\pi} \quad \frac{3}{3} r^2 h$$

$$\frac{1}{h}\cdot\frac{3V}{\pi} = r^2 \quad \frac{\pi}{\pi}\frac{1}{h}$$

$$\boxed{\frac{3V}{h\cdot\pi} = \sqrt{r^2}}$$

$$\boxed{\sqrt{\frac{3V}{h\cdot\pi}} = r}$$

(5) Solve for v

$h = vt - 16t^2$

$+16t^2 \qquad +16t^2$

$\frac{h+16t^2}{t} = \frac{vt}{t}$

$\boxed{\frac{h+16t^2}{t} = v}$

$\frac{h}{t} + \frac{16t^2}{t} = v$

$\boxed{\frac{h}{t} + 16t = v}$

(6) Solve for c

$4 \cdot A = \frac{b+c+d+e}{4} \cdot 4$

$4A = b+c+d+e$

$-b-d-e \qquad -b \quad -d \quad -c$

$\boxed{4A-b-d-e = c}$

(7) Solve for π

$A = 2\pi r^2 + 2\pi rh$

$A = \frac{\pi(2r^2+2rh)}{(2r^2+2rh)}$

$\frac{A}{2r^2+2rh} = \pi$

(8) Solve for r

$V = \frac{1}{3}\pi h^2(3r-h)$

$\frac{V}{\pi h^2} = \frac{1}{3}(3r-h)$

$\frac{V}{\pi h^2} = r - \frac{1}{3}h$

$+\frac{1}{3}h \qquad +\frac{1}{3}h$

$\boxed{\frac{V}{\pi h^2} + \frac{h}{3} = r}$