

§ 2.3 #5 20, 27, 42, 54

#19. Solve $s = \frac{n}{2}(a+L)$ for L .

$$\text{LCD} = 2$$

$$2s = n(a+L)$$

$$2s = na + nL$$

$$2s - na = nL$$

$$\frac{2s - na}{n} = \frac{nL}{n}$$

$$\frac{2s - na}{n} = L$$

PEMDAS - Evaluation
SADM - Equation-solving

#16. Solve $S = 2\pi r^2 + 2\pi r h$ for h .

$$\cancel{S} - 2\pi r^2 + 2\pi r h = S$$

$$2\pi r h = S - 2\pi r^2$$

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

$$A = P \left(1 + \frac{r}{n} \right)^{nt}$$

$$P = \$3500$$

$$r = 3\% = \frac{3}{100} = .03$$

$$t = 10 \text{ yrs}$$

$n = \#$ of periods per year

Find A , when $n = 1, 2, 4, 12, 365$

$A = \text{Future Value}$

```
3500*(1+.03/1)^1
*10
36050
```

No! This is
 $3500 \left(1 + \frac{.03}{1} \right)^1 (10)$

```
4703.707328
3500*(1+.03/2)^(
2*10)
4713.992523
3500*(1+.03/4)^(
4*10)
4719.220143
```

$n=1: \$4703.71 = A$

$n=2: \$4713.99$

$n=4: \$4719.22$

```
3500*(1+.03/365)
^(365*10)
4724.447582
3500*(1+.03/999)
^(999*10)
4724.484544
```

$n=365: \$4724.45$

$n=999: \$4724.48$

$$\frac{.03}{365} \approx 8.2191780821917808219178082191781e-5$$

$$\approx 8.21917808 \times 10^{-5}$$

0000008.21917808