

588 1-12

1. $n = \frac{A}{b}$

2. $b = \frac{P-2h}{2}$ or $b = \frac{P}{2} - h$

3. $r = \frac{\sqrt{3V}}{\sqrt{\pi H}}$

4. $b = \sqrt{c^2 - a^2}$

5. $a = \frac{2 \cdot SA - 1}{P}$

6. $y_2 = m(x_2 - x_1) + y_1$ or $y_2 = mx_2 - mx_1 + y_1$

7. $V = \frac{d}{t}$

8. $F = \frac{9}{5}C + 32$

9. $L = g\left(\frac{T}{2}\right)^2$

10.

	Penta	Hexa	Octa	Deca	Dodeca
faces	5	6	8	10	12
Edges	8	10	12	16	20
Vertices	5	6	6	8	10

11. a. $r \approx 3.63\text{cm}, 3.3\text{cm}, 3.02\text{cm}, 2.79\text{cm}$

b. $h \approx 9.32\text{cm}, 10.49\text{cm}, 11.61\text{cm}, 12.70\text{cm}$

c. $V \approx 129\text{cm}^3, 120\text{cm}^3, 111\text{cm}^3, 104\text{cm}^3$

d. greatest volume? tallest?

e. smallest? by height? Volume? Radius?

12 a. $A = \frac{m_1 + m_2 + m_3 + 2f}{5}$

b. ave. = 60 \rightarrow 31 ave. 70 \rightarrow 56 ave. 80 \rightarrow 81

ave. 90 \rightarrow 106 (not possible)