Simple Interest (Section 8.5) pg. 452

\[ I = P \cdot R \cdot T \]

Compound Interest (Section 8.5) pg. 454

\[ A = P \cdot (1 + \frac{r}{n})^{n \cdot t} \]

Geometric Formulas

**Rectangle**

Perimeter: \( P = 2l + 2w \)
Area: \( A = lw \)

**Square**

Perimeter: \( P = 4s \)
Area: \( A = s^2 \)

**Triangle**

Perimeter: \( P = a + b + c \)
Area: \( A = \frac{1}{2} bh \)

**Sum of Angles of Triangle**

\( A + B + C = 180^\circ \)
The sum of the measures of the three angles is \( 180^\circ \).

**Pythagorean Theorem**

(for right triangles)

\[ (a)^2 + (b)^2 = (c)^2 \]
One 90° (right) angle

**Trapezoid**

Perimeter: \( P = a + b + c + B \)
Area: \( A = \frac{1}{2} h (B + b) \)

**Parallelogram**

Perimeter: \( P = 2a + 2b \)
Area: \( A = bh \)

**Circle**

Circumference:
\[ C = \pi d \]
\[ C = 2\pi r \]
Area: \( A = \pi r^2 \)

**Rectangular Solid**

Volume: \( V = LWH \)
Surface Area:
\[ S = 2LW + 2HL + 2HW \]

**Cube**

Volume: \( V = s^3 \)
Surface Area: \( S = 6s^2 \)

**Right Circular Cylinder**

Volume: \( V = \pi r^2 h \)
Surface Area:
\[ S = 2\pi r^2 + 2\pi rh \]

**Sphere**

Volume: \( V = \frac{4}{3} \pi r^3 \)
Surface Area: \( S = 4\pi r^2 \)

**Square-Based Pyramid**

Volume: \( V = \frac{1}{3} \cdot s^2 \cdot h \)