12) $T = 180(n-2)$

$n = \#\text{ sides} \rightarrow 8$

$180(8-2)$

PEMDAS $\quad 180 \cdot (6) = 1080 = T$

13)

$$d = \frac{1}{2}gt^2$$

$g = 5.3 \text{ ft}/\text{sec}^2$

$t = 8 \text{ sec}$

$\frac{1}{2} \cdot 5.3 \cdot 8^{2} \quad 64$

$d = 169.6 \text{ ft}$

22) $\dfrac{T}{S}$

~~~~~~~~~~

24) $\overset{d}{\$25} \rightarrow \text{chair}$

$\overset{P}{35\%} \text{ profit}$

$2\overset{d}{5} + .\overset{P}{35}\cdot\overset{d}{25}$

$d + Pd$

23)

$$C - .25C \Big\rangle = .75C \Big\rangle =$$

16) $\dfrac{P}{D}$

1.2   What is a function?

function: pairing or correspondence between 2 variables such that each value of the first (independent) variable corresponds to exactly one value of the 2nd (dependent) variable.

*for every 'x' there is exactly 1 'y' value.

$$P = 5h$$

↑ pay

↑ hours

h = indep. variable (x)

P = dep. variable (y)

P is a function of h.

↑ dep

↑ indep.

<u>domain</u>: values substituted
for indep. variable (x)

<u>Range</u>: values substituted
for dep. variable (y)

ie: P = 5h   {R > 0}

D: {5, 6, 7, 8}

R: {25, 30, 35, 40}

*real #s: can be represented
by decimals.

R   2, 51, -28, 32.67
         5/8, π

*rational #s: represented
by fractions or decimals
that end, repeat or have a
pattern.
2, 51, -28, 5/8

Integers: $\{\ldots -3, -2, -1, 0, 1, 2, 3 \ldots\}$

no frac / no dec.

whole: $\{0, 1, 2, 3 \ldots\}$

no frac / no dec / no neg

natural/counting #s:

$\{1, 2, 3 \ldots\}$

no frac / dec / neg / zero