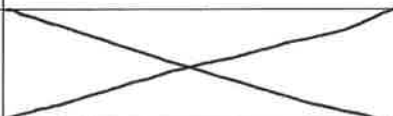


	English	Graph	Functional Notation
1	At time $t = 4$, the temperature is 400° .	At $t = 4$, the height of graph is 400.	$P(4) = 400$
2	the change in temp. from time $t=a$ to $t=b$ minutes	the change in the height of the graph from $t=a$ to $t=b$	$P(b) - P(a)$
3	the incremental rate of change in temperature from time a to time b	the slope of the secant line through the temp. graph at $t=a$ and $t=b$	$\frac{P(b) - P(a)}{b - a}$
4	the temperature at $t=0$ minutes	the "y"-intercept of the temperature graph	$P(0)$
5		the slope of the diagonal line through the temp graph at $t=b$	$\frac{P(b)}{b}$
6	the overall rate of change of temperature after b minutes	the slope of the secant line through the temp. graph at $t=0$ and $t=b$	$\frac{P(b) - P(0)}{b - 0}$
7	The temp after 10 min is higher than the temp after 9 min.	The graph of temp is higher at $t=10$ than at $t=9$.	$P(10) > P(9)$ * * false
8	Between 4 and 6 minutes, the temperature rises by 140° .	Between $t=4$ and $t=6$, the temp graph rises 140° .	$P(6) - P(4) = 140$
9	During the first four minutes, the temperature rises on average 57° per minute.	The slope of the secant from $t = 0$ to $t = 4$ is 57.	$\frac{P(4) - P(0)}{4} = 57$
10	When is the temperature 350° ?	For what value of t is the height of the temp graph 350?	For what value of t is $P(t) = 350$?
11	There are three times when the temp is 200° .	The graph has height 200 for three different values of t .	There are three values of t such that $P(t) = 200$.
12	Find a time at which the temp is more than 100° higher than the temp at $t=2$ min.	Find a time at which the height of the temp graph is at least ^{more than} 100° higher than the height at $t=2$.	Find t so that $P(t) - P(2) > 100$.
13	Find two times, 2 minutes apart, when the temperature is the same.	Find two times, two min apart, at which the height of the temp graph is the same.	Find two times, t and $t+2$, such that $P(t) = P(t+2)$.
14	incremental rate of change in temp from $t=2$ to $t=h$ minutes	slope of the secant line from 2 to h	$\frac{P(h) - P(2)}{h - 2}$

Super important!

	English	Graph	Functional Notation
15	How many minutes after $t = 4$ does the temperature become 250° ?	For what value of h is the height of the graph at $4+h$ equal to 250 ?	For what value of h is $P(4+h) = 250$?
16	Over which three-minute interval is the change in temp greatest?	For which 3-unit horizontal change is the vertical change in the temp graph greatest?	If $\Delta t = 3$, for what t is ΔP highest?
17	the change in temp over the 2-minute interval beginning at time t	the change in height of the graph between t and $t + 2$	$P(t+2) - P(t)$
18	Find all values of r such that the temp at time $3+r$ is 100° higher than the temp at $t=3$.	Find the values of r such that the graph at $t=3+r$ is 100° higher than the graph at $t=3$.	Solve $P(3+r) - P(3) = 100$ for r
19	average ^{rate of change} of temp over the 3-minute interval starting at time t	slope of secant line from t to $t + 3$.	$\frac{P(t+3) - P(t)}{3}$
20	the average rate of change of temperature for h minutes beginning at $t = 3$	slope of secant line from 3 to $3+h$	$\frac{P(3+h) - P(3)}{h}$
21	average rate of change of temperature from $t=p$ to $t=q$	slope of the secant from $t = p$ to $t = q$.	$\frac{P(q) - P(p)}{q - p}$
22	Do the temperatures at $t=2$ and $t=3$ add up to the temp at $t=5$?	Do the heights at $t=2$ and $t=3$ add up to the height at $t=5$?	Is $P(2) + P(3) = P(5)$?
23	When is the temp twice as high as the temp at $t=10$ min?	For which t is graph twice as high as it is when $t = 10$?	For which t is $P(t) = 2 \cdot P(10)$?
24	Find a span over which temp rises by $50^\circ/\text{min}$ on average.	Find two times over which the slope of the secant line through the temp graph is 50 .	Find two times a and b such that $\frac{P(b) - P(a)}{b - a} = 50$.
25	The temp changes faster on average from $t=2$ to $t=5$ than it does from $t=2$ to $t=8$.	The slope of the secant line through temp from $t=2$ to $t=5$ is steeper than the secant from $t=2$ to $t=8$.	$\frac{P(5) - P(2)}{5 - 2} > \frac{P(8) - P(2)}{8 - 2}$