Aim:

Questions / Main Ideas /Vocabulary	Notes / Answers / Definitions / Examples / Sentences			
Test-Taking Techniques				
Underline!	UTFQ			
	Tests will try to throw you off with different UNITS or VARIABLES in the problem than the answers.			
	BE CAREFUL - UNDERLINE what you are supposed to be finding!			
Example:	Solve this equation for $x$ in terms of $y$ : $3x + 2 = 4$			
Annotate!	Tests will give you long word problems.  • UNDERLINE KEY WORDS  • CIRCLE NUMBERS  TRANSLATE WORDS INTO VARIABLES			
Example:	Jeff brought a new car for \$10,450. He knows this car's value will			
	decrease by 20% each year. Jeff write the following function to			
	model the cost of his car after $t$ years: $C(t) = 10,450(.80)^t$ . If Jeff			
	plans to sell the car after five years, what will be the value of the			
	car at that time, to the nearest dollar			

## Multiple Choice

## **BACKSOLVE!**

When do you use this technique?

→ When you see WORD PROBLEMS!!!

What numbers should you plug in?

→ The ANSWER CHOICES

Must you check all answers?

→ NO - once you get the right answer you are done!

Example:

What are the zeros of the following polynomial:  $x^3 - 9x = 0$ ? (2) 0, 9 (3) 3, -3 (4) 0, 3, -3(1)9

## Plug-In!

When do you use this technique?

→ When you see VARIABLES!!! (a, x, y, etc.)

What numbers should you plug in?

- → NEVER use 0 or 1
- → Choose appropriate numbers for the problem (i.e. percents use 100, exponents - use small numbers)

Must you check all answers?

→ YES

Example:

Which expression is equivalent to  $(x^2 + 3x - 4)(x - 5)$ ?

$$(1) x^3 + 8x^2 - 19x + 20$$

(1) 
$$x^3 + 8x^2 - 19x + 20$$
 (3)  $x^3 - 2x^2 - 11x + 20$ 

$$(2) x^3 - 2x^2 - 19x + 20$$

(2) 
$$x^3 - 2x^2 - 19x + 20$$
 (4)  $x^3 - 8x^2 - 11x + 20$ 

## Plug-In!

Tests will give you equations.

PUT THEM INTO THE CALCULATOR!

- → look at the graph
- → look at the table

Tests will give you graphs/tables

- → make up your own linear/exponential/quadratic/square-root/absolute value equation and put it into your Y= as an example to compare to your picture
- → put data into your L1 & L2 and run a regression

Example:

The graph of the equation  $y = 3^x$  contains which point?

$$(2)(-2,\frac{1}{9})$$
  $(3)(2,6)$ 

$$(4)(-3,-\frac{1}{9})$$

W.N. Wrong Neighborhood? → If you're dividing...should your number be bigger/smaller than what you originally started with?

→ If you are dealing with a linear function, should your graph be curved?

Does your answer make sense???

Example:

The selling prices for a group of cars were recorded when the cars were new and for an additional five years. The results are summarized in the tables below. Which car's price dropped at a constant percent rate each year?

(1)	Year	Cost
	0	25,000
	1	20,000
	2	15,000
	3	10,000
	4	5,000
	5	0

)	Year	Cost
	0	25,000
	1	30,000
1	2	35,000
	3	40,000
	4	45,000
	5	50,0000

)	Year	Cost
	0	25,000
	1	20,000
	2	16,000
	3	12,800
	4	10,240
	5	8192

)	Year	Cost
	0	25,000
	1	30,000
	2	36,000
	3	43,000
	4	52,840
	5	62,208
		02,200

Strategy for Pacing Yourself to be Successful

Go through the entire exam, answering questions that are easy for you. If you do not know the answer or are becoming frustrated, continue on to the next problem. Star the questions that you have to go back to after completing the less difficult problems.