Math

Inscribed Angle Theorems
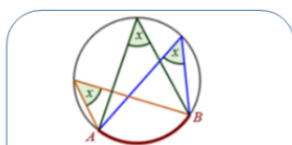
The inscribed angles subtended by the same arc are equal.
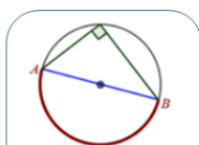
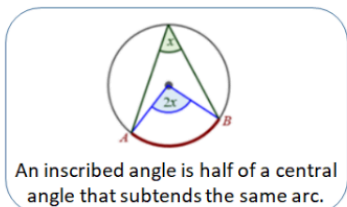Inscribed angle in a semicircle is 90°.

An inscribed angle is half of a central angle that subtends the same arc.

DISCRIMINANT

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

- $b^2 - 4ac > 0 \rightarrow$ **2 real solutions**
- $b^2 - 4ac = 0 \rightarrow$ **1 real solution**
- $b^2 - 4ac < 0 \rightarrow$ **0 real solutions**

Greater than: (1 + x/100) or (100 + x)% | **Less than** (1 - x/100) or (100 - x)%

Sum of solutions: $\dfrac{-b}{a}$

Products of solutions: $\dfrac{c}{a}$

X-value of vertex: $\dfrac{-b}{2a}$

Complete the Square (Find C value of quadratic): $\left(\dfrac{b}{2}\right)^2$

(Desmos Tricks)

1. ⚠ $\text{mean}(x_1, x_2, x_3, x_4, \ldots)$
2. ⚠ $\text{median}(x_1, x_2, x_3, x_4, \ldots)$
3. ⚠ $\text{stdev}(x_1, x_2, x_3, x_4, \ldots)$
4. ⚠ $\text{mod}(x_1, x_2)$

(Don't forget about **linear regression** and **"table"**)

English

(Transitions)

Continue		Cause-and Effect	Contradict
Add Information	**Emphasize**	Accordingly	Alternately
Also	In fact	As a result	Alternatively
And	Indeed	As such	(Al)though
Furthermore		Because	But
In addition	**Compare**	Consequently	Conversely
Moreover	Likewise	For	Despite/In spite of
	Similarly	Hence	Even so
Give Example		Since	Even though
For example	**Sequence of Events**	So	However
For instance	Previously	Thus	In any case
Specifically	Subsequently	Therefore	In contrast
	Finally	To this end	Instead
Define, Clarify	While		Meanwhile
Effectively			Nevertheless
Essentially			Nonetheless
In other words			On the contrary
That is			On the other hand
			Otherwise
			Rather
			Regardless
			Still
			Whereas
			While
			Yet

(Notes)

You **don't** need to read the notes; instead, read the question and go straight to the answer choices

(Standard English Convention)

Determine if each phrase is **Independent** or **Dependent**

Combining Sentences
1. Period or Semicolon *(If a question has both, they're wrong unless it's a complex list)*
2. Comma + Coordination (FANBOYS) Conjunction
3. Colon or Dash

(Main Idea/Others)

College Board **won't say anything socially wrong a**bout cultures, women, or science
There is **ONE** correct answer; ensure everything is correct **based on the text**