Calculating the Yield of ATP from Aerobic Respiration

Fill in the blanks below to indicate:

- **The number of ATP and energy carrier molecules produced during each phase of aerobic respiration.**
- **The total gain of ATP from one glucose molecule at the end of aerobic respiration.**

	ATP	Other Energy Carriers	
Part A-			
Glycolysis- (The breakdown of glucose into two pyruvate molecules.)			
ATP used	-_____Molecules		
ATP produced	+_____Molecules		
NADH produced		=_____Molecules	
Part A Total	**=_____ATP**	**=_____NADH**	

Below List the Energy Rich Molecules Produced from One Pyruvate Molecule!

Part B-			
Acetyl CoA Formation- (from one pyruvate)			
NADH produced		=_____Molecules	
Krebs Cycle-			
ATP produced	=_____Molecules		
NADH produced		=_____Molecules	
$FADH_2$ produced			=_____Molecules
Part B Sub-Total	=_____ATP	=_____NADH	=_____$FADH_2$
Two pyruvate molecules were made during glycolysis and entered the Krebs cycle.	→ Multiply the number of each molecule by 2. ↓		
Part B Total	**=_____ATP**	**=_____NADH**	**=_____$FADH_2$**
Add Part A and B	**=_____ATP**	**=_____NADH**	**=_____$FADH_2$**
Part C- Electron Transport	(No Change in Number) ↓	Multiply by 3 Each Molecule produces 3 ATP ↓	Multiply by 2 Each produces 2 ATP. ↓
Add these 3 numbers ⇨	**=_____ATP**	**=_____ATP**	**=_____ATP**
Grand Total of ATP Produced			