**IB Physics**

**FA 15.3 - Thermodynamics**

Name

Favorite Celebrity (Besides Matt Damon)
**Show your work, and circle your answers and use sig figs to receive full credit.**

When you have finished this, go to the website and check your answers. If you got a problem wrong, cross it off on the front, and do it correctly on the back.



Process XB is isothermal, XC adiabatic. The temperature at X is 430. K

A. For process XA, find the temperature at A, and the W, ΔU, and Q. [3]

B. For process XC find the W, ΔU, and Q. [3]

C. For process XD find the temperature at D, and the W, ΔU, and Q. [2]

D. For process XB the work done is 1288 J. Find the pressure at B, and the W, ΔU, and Q. [2]