

$$\sum_{X=1}^n X = ?$$

TRICK:

FINISH  
FOR  
HW

$$\sum_{X=1}^n$$

$$X^2 - (X-1)^2 =$$

$$1^2 - 0^2 + 2^2 - 1^2 - \dots$$

plug in # 1 through n

end result:  $\sum_{X=1}^n X^2 - (X-1)^2 = ?$