Sample Ranch Building Airflow Calculations Exercise 5

Step 1: Determine the BAS (in CFMn) based on volume:
AIRFLOW = 0.35 ACH x volume / 60

Step 2: Determine the BAS (in CFMn) based on occupancy:
Sample Rang has 2 bedrooms, worst case occupancy is bedrooms +1 or 3 occupants
AIRFLOW = 15 CFM x occupants

Step 3: Determine the BAS in CFM50
Using the New York height corrected N-factor from your BPI Standards Pg. 5 convert the **Higher** of the two CFMn from steps 1 & 2 into CFM50.
CFM$_{50}$ = AIRFLOW x height-corrected n-factor

Step 4: Determine 70% of BAS or Mechanical Ventilation Requirement (MVR)
MVR 70% of BAS = BAS CFM50 x .7