A good answer should have at least

B Instructor SSN
Students, ID assn.
Classes need unique ID for
each section of a class.
[NB sections & classes could be separate entities]

C

F3 = (C3 - MIN(F2;F15)) / (MAX(F2;15) - MIN(F2;F15))
C17 = 1/C16
C18 = C17/SUM($B$17:$D$17)
H 3 = E3*B18 + E3*C18 + E3*D18

B Hint: Do output numbers change as input
numbers change? More importantly does top
teachers change. Easiest example would be raw weights.
(4) \( N = \text{# Novice Classes} \) and \( A = \text{# Advanced Classes} \)

\[ \text{Maximize Students: Max } N \times 20 + A \times 10 \]

or

\[ \text{Maximize Revenue: Max } N \times 20 \times 30 + A \times 10 \times 100 \]

(B)

\[
\begin{align*}
\text{Max } & N \times 20 \times 30 + A \times 10 \times 100 \\
\text{subject to} & \\
\text{Classroom Hours: } & N + A \leq 80 \\
\text{Instructor Hours: } & N \times (1+2) + A \times (2+4) \leq 300 \\
\text{Minimum # Novice/}: & N \times .75 + A \times .25 < 0 \\
\end{align*}
\]

\[ N > .25(N + A) \]

\[ -.75N + .25A < 0 \]

(C) Classroom Hours are always binding constraint, so purchase classroom hour first.

BONUS: Value 1 Instructional Hr. = $80

(Already have too many).

Value 1 Classroom Hr. = $600

(revenue from training).