**Pugh Chart Practice**

Yuri is finally ready to buy a new car. Her dream car will let her drive groups of friends around. She absolutely loves red, but blue or silver would work as well. She hates green. She drives quite a bit, so she wants gas mileage that averages 25 mpg or more. She is trying to stick to a budget of $20,000 or less; however, she can afford a little more if needed. Budget and gas mileage are really the most important items for her.

In her search, she found several options. None fit her dream car, but each have something to offer that she is looking for. She decides to use a Pugh Chart to help her make a decision.

Step 1: Identify and clearly define the criteria (done below). If one criterion is more important than another, then give it a weight or a multiplier to show it has the most value.

Step 2: Determine the baseline or ideal for the stakeholder

Step 3: Compare the criteria using the values below

* ++ Much Better (+2)
* + Better (+1)
* S for the same or use zero
* - Worse (-1)
* - - Much Worse (-2)

Step 4: Add up the total + and – for each option or alternative. Don’t forget to consider the weight or multiplier you have for an important criterion.

Step 5: Use the totals to help you determine which is the best choice

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Criteria (weight) | Alternatives | | | |
| Desired Car | Vehicle 1 | Vehicle 2 | Vehicle 3 |
| Color | 0 red |  |  |  |
| Gas Mileage | 0 25 and ↑ |  |  |  |
| Seating | 0 groups of friends |  |  |  |
| Cost | 0 $20,000 or less |  |  |  |
| Total |  |  |  |  |

Vehicle 1: Red 4-door sedan that gets 20 mpg and costs $14,000, seats 5

Vehicle 2: Silver SUV that gets 45 mpg and costs $31,000, seats 7

Vehicle 3: Green 2-door sports car gets 30 mpg and costs $29,000, seats 2