1. Use a weighted scoring model to choose between three locations (A, B, C) for setting up a factory. The relative weights for each criterion are shown in the following table.

A score of 1 represents unfavorable, 2 satisfactory, and 3 favorable.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Location |  |  |
| Category | Weight | A | B | C |
| Labor costs | 20 | 1 | 2 | 3 |
| Labor productivity | 20 | 2 | 3 | 1 |
| Labor supply | 10 | 2 | 1 | 3 |
| Union relations | 10 | 3 | 3 | 2 |
| Material supply | 10 | 2 | 1 | 1 |
| Transport costs | 25 | 1 | 2 | 3 |
| Infrastructure | 5 | 2 | 2 | 2 |

2. Nina is trying to decide in which of four shopping centers to locate her new boutique. Some cater to a higher class of clientele than others, some are in an indoor mall, some have a much greater volume than others, and, of course, rent varies considerably. Because of the nature of her store, she has decided that the class of clientele is the most important consideration. Following this, however, she must pay attention to her expenses, and rent is a major item-probably 90 percent as important as clientele. An indoor, temper­ature-controlled mall is a big help for stores such as hers where 70 percent of sales are from passersby slowly strolling and window shopping. Thus, she rates this as about 95 percent as important as rent. Last, a higher volume of shoppers means more potential sales; she thus rates this factor as 80 percent as important as rent.

As an aid in visualizing her location alternatives, she has constructed the following table. A "good" is scored as 3, "fair" as 2, and "poor" as 1.

Location

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 |
| Class of clientele | fair | good | poor | good |
| Rent | good | fair | poor | good |
| Indoor mall | good | poor | good | poor |
| Volume | good | fair | good | poor |

**Use a weighted score model to help Nina come to a decision.**