**PROMETHEE II**

**Exercício 1**

|  |  |  |
| --- | --- | --- |
|  | Retorno (max) | Risco (min) |
| Ativo 1 | 5.2 | 3.5 |
| Ativo 2 | 4.3 | 1.2 |
| Ativo 3 | 6.7 | 2.0 |

Dado que,

= (

**Matriz de preferências:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 |  |
| 1 | 0 | 0,18 | 0 | 0.18 |
| 2 | 0,6 | 0 | 0,36 | 0.96 |
| 3 | 0,9 | 0,4 | 0 | 1.3 |
|  | 1.5 | 0.58 | 0.36 |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |

3 > 2 > 1

Ativo 3 > Ativo 2 > Ativo 1

**Exercício 2**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Prazer (max) | Tempo de filme (min) | Novidade (max) |
| Lagoa Azul | 3 | 1.2 | 3 |
| Loucademia de Policia | 6 | 0.95 | 2 |
| Os Goonies | 5 | 1.0 | 4 |
| Os Caça- Fantasmas | 5 | 0.8 | 1 |

Dado que,

= (

**Matriz de preferências:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 |  |
| 1 | 0 | 0.333 | 0 | 0.333 |  |
| 2 | 0.667 | 0 | 0.4 | 0.667 |  |
| 3 | 0.933 | 0.333 | 0 | 0.333 |  |
| 4 | 0.667 | 0.2 | 0.267 | 0 |  |
|  |  |  |  |  |  |

3 > 2 > 4 >1

Os Goonies > Loucademia de Polícia > Os Caça- Fantasmas > Lagoa Azul

**Exercício 3**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Horas de trabalho (min) | Salário (max) | Realização profissional (max) |
| Microsoft | 60 | 34000 | 8 |
| Apple | 55 | 30000 | 8 |
| Petrobrás | 40 | 28700 | 7 |
| Casas Bahia | 35 | 25000 | 5 |

Dado que,

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**Matriz de preferências:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 |  |
| 1 | 0 | 0.4 | 0.7 | 0.7 |  |
| 2 | 0.1875 | 0 | 0.56 | 0.7 |  |
| 3 | 0.3 | 0.3 | 0 | 0.7 |  |
| 4 | 0.3 | 0.3 | 0.1875 | 0 |  |
|  |  |  |  |  |  |

1 > 2 > 3 >4

Microsoft > Apple > Petrobrás > Casas Bahia