P**A** = $2; P**B** = $1; Budget = $5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q good A** | **TUA** | **MUA** | **MUA/PA** |  | **Q good B** | **TUB** | **MUB** | **MUB/PB** |
| 0 | 0 | - | - |  | 0 | 0 | - | - |
| 1 | 12 |  |  |  | 1 | 9 |  |  |
| 2 | 20 |  |  |  | 2 | 17 |  |  |
| 3 | 26 |  |  |  | 3 | 22 |  |  |
| 4 | 28 |  |  |  | 4 | 23 |  |  |
| 5 | 26 |  | - |  | 5 | 22 |  | - |

P**A** = $2; P**B** = $1; Budget = $5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q good A** | **TUA** | **MUA** | **MUA/PA** |  | **Q good B** | **TUB** | **MUB** | **MUB/PB** |
| 0 | 0 | - | - |  | 0 | 0 | - | - |
| 1 | 12 | 12 |  |  | 1 | 9 | 9 |  |
| 2 | 20 | 8 |  |  | 2 | 17 | 8 |  |
| 3 | 26 | 6 |  |  | 3 | 22 | 5 |  |
| 4 | 28 | 2 |  |  | 4 | 23 | 1 |  |
| 5 | 26 | - 2 | - |  | 5 | 22 | -1 | - |

P**A** = $2; P**B** = $1; Budget = $5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q good A** | **TUA** | **MUA** | **MUA/PA** |  | **Q good B** | **TUB** | **MUB** | **MUB/PB** |
| 0 | 0 | - | - |  | 0 | 0 | - | - |
| 1 | 12 | 12 | 6 |  | 1 | 9 | 9 | 9 |
| 2 | 20 | 8 | 4 |  | 2 | 17 | 8 | 8 |
| 3 | 26 | 6 | 3 |  | 3 | 22 | 5 | 5 |
| 4 | 28 | 2 | 1 |  | 4 | 23 | 1 | 1 |
| 5 | 26 | - 2 | - |  | 5 | 22 | -1 | - |

P**A** = $2; P**B** = $1; Budget = $5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q good A** | **TUA** | **MUA** | **MUA/PA** |  | **Q good B** | **TUB** | **MUB** | **MUB/PB** |
| 0 | 0 | - | - |  | 0 | 0 | - | - |
| 1 | 12 |  |  |  | 1 | 9 |  |  |
| 2 | 21 |  |  |  | 2 | 17 |  |  |
| 3 | 27 |  |  |  | 3 | 22 |  |  |
| 4 | 30 |  |  |  | 4 | 23 |  |  |
| 5 | 27 |  |  |  | 5 | 22 |  |  |

P**A** = $2; P**B** = $1; Budget = $5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q good A** | **TUA** | **MUA** | **MUA/PA** |  | **Q good B** | **TUB** | **MUB** | **MUB/PB** |
| 0 | 0 | - | - |  | 0 | 0 | - | - |
| 1 | 12 | 12 |  |  | 1 | 9 | 9 |  |
| 2 | 21 | 9 |  |  | 2 | 17 | 8 |  |
| 3 | 27 | 6 |  |  | 3 | 22 | 5 |  |
| 4 | 30 | 3 |  |  | 4 | 23 | 1 |  |
| 5 | 27 | - 3 |  |  | 5 | 22 | -1 |  |

P**A** = $2; P**B** = $1; Budget = $5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q good A** | **TUA** | **MUA** | **MUA/PA** |  | **Q good B** | **TUB** | **MUB** | **MUB/PB** |
| 0 | 0 | - | - |  | 0 | 0 | - | - |
| 1 | 12 | 12 | 6 |  | 1 | 9 | 9 | 9 |
| 2 | 21 | 8 | 4 |  | 2 | 17 | 8 | 8 |
| 3 | 27 | 6 | 3 |  | 3 | 22 | 5 | 5 |
| 4 | 30 | 2 | 1 |  | 4 | 23 | 1 | 1 |
| 5 | 27 |  |  |  |  |  |  |  |

P**1** = $2; P**2** = $1; Budget = $5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q good 1** | **TU1** | **MU1** | **MU1/P1** |  | **Q good 2** | **TU2** | **MU2** | **MU2/P2** |
| 1 | 12 |  |  |  | 1 | 9 |  |  |
| 2 | 21 |  |  |  | 2 | 17 |  |  |
| 3 | 27 |  |  |  | 3 | 22 |  |  |
| 4 | 30 |  |  |  | 4 | 23 |  |  |

P**1** = $2; P**2** = $1; Budget = $5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q good 1** | **TU1** | **MU1** | **MU1/P1** |  | **Q good 2** | **TU2** | **MU2** | **MU2/P2** |
| 1 | 12 | 12 |  |  | 1 | 9 | 9 |  |
| 2 | 20 | 8 |  |  | 2 | 17 | 8 |  |
| 3 | 26 | 6 |  |  | 3 | 22 | 5 |  |
| 4 | 28 | 2 |  |  | 4 | 23 | 1 |  |

P**1** = $2; P**2** = $1; Budget = $5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q good 1** | **TU1** | **MU1** | **MU1/P1** |  | **Q good 2** | **TU2** | **MU2** | **MU2/P2** |
| 1 | 12 | 12 | 6 |  | 1 | 9 | 9 | 9 |
| 2 | 20 | 8 | 4 |  | 2 | 17 | 8 | 8 |
| 3 | 26 | 6 | 3 |  | 3 | 22 | 5 | 5 |
| 4 | 28 | 2 | 1 |  | 4 | 23 | 1 | 1 |

P**1** = $2; P**2** = $1; Budget = $5

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Q good 1** | **MU1** | **MU1/P1** |  | **Q good 2** | **MU2** | **MU2/P2** |
| 1 | 12 |  |  | 1 | 9 |  |
| 2 | 8 |  |  | 2 | 8 |  |
| 3 | 6 |  |  | 3 | 5 |  |
| 4 | 2 |  |  | 4 | 1 |  |

Calculate MU

**TU  
MU = -------------------  
 Qconsumed**

- "utility" does not mean "usefulness"

- "utility" does not mean "usefulness"

|  |
| --- |
| **MU1** |
| 12 |
| 8 |
| 6 |
| 2 |

|  |
| --- |
| **MU1** |
| 12 |
| 8 |
| 6 |
| 2 |

|  |  |  |
| --- | --- | --- |
| **Q good 1** | **TU1** | **MU1** |
| 1 | 12 |  |
| 2 | 20 |  |
| 3 | 26 |  |
| 4 | 28 |  |

|  |  |  |
| --- | --- | --- |
| **Q good 1** | **TU1** | **MU1** |
| 1 | 12 | 12 |
| 2 | 20 | 8 |
| 3 | 26 | 6 |
| 4 | 28 | 2 |

|  |  |  |
| --- | --- | --- |
| **Q good 1** | **TU1** | **MU1** |
| 1 | 12 | 12 |
| 2 | 20 | 32 |
| 3 | 26 | 58 |
| 4 | 28 | 86 |

|  |  |  |
| --- | --- | --- |
| **Q good 1** | **TU1** | **MU1** |
| 1 | 12 | 12 |
| 2 | 20 | 40 |
| 3 | 26 | 78 |
| 4 | 28 | 112 |

|  |  |  |
| --- | --- | --- |
| **Q good 1** | **TU1** | **MU1** |
| 1 | 12 | 12 |
| 2 | 20 | 20 |
| 3 | 26 | 26 |
| 4 | 28 | 28 |

|  |  |  |
| --- | --- | --- |
| **Q good 1** | **TU1** | **MU1** |
| 1 | 12 | 12 |
| 2 | 20 | 8 |
| 3 | 26 | 6 |
| 4 | 28 | 2 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q good 1** | **TU1** | **MU1** | **MU1/P1** |  | **Q good 2** | **TU2** | **MU2** | **MU2/P2** |
| 1 | 12 | 12 |  |  | 1 | 9 | 9 |  |
| 2 | 20 | 8 |  |  | 2 | 17 | 8 |  |
| 3 | 26 | 6 |  |  | 3 | 22 | 5 |  |
| 4 | 28 | 2 |  |  | 4 | 23 | 1 |  |

P1 = $2; P2 = $1; Budget = $5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q good A** | **TUA** | **MUA** | **MUA/PA** |  | **Q good B** | **TUB** | **MUB** | **MUB/PB** |
| 1 |  |  |  |  | 1 |  |  |  |
| 2 |  |  |  |  | 2 |  |  |  |
| 3 |  |  |  |  | 3 |  |  |  |
| 4 |  |  |  |  | 4 |  |  |  |

P1 = $2; P2 = $1; Budget = $5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q good A** | **TUA** | **MUA** | **MUA/PA** |  | **Q good B** | **TUB** | **MUB** | **MUB/PB** |
| 1 |  |  |  |  | 1 |  |  |  |
| 2 |  |  |  |  | 2 |  |  |  |
| 3 |  |  |  |  | 3 |  |  |  |
| 4 |  |  |  |  | 4 |  |  |  |

P1 = $2; P2 = $1; Budget = $5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q good A** | **TUA** | **MUA** | **MUA/PA** |  | **Q good B** | **TUB** | **MUB** | **MUB/PB** |
| 1 |  |  |  |  | 1 |  |  |  |
| 2 |  |  |  |  | 2 |  |  |  |
| 3 |  |  |  |  | 3 |  |  |  |
| 4 |  |  |  |  | 4 |  |  |  |

To maximize utility a consumer should   
allocate their income so that the last   
dollar spent on each product yields the   
same amount of extra (marginal) utility.

MU of product A MU of product B MU of product C

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_ = **. . . .**

Price of A Price of B Price of C

MBA = MCA

MCA = MBB given up because consumer bought another A

MBA per $ spent should equal MBB per $ spent

|  |  |
| --- | --- |
| **Q good A** | **TUA** |
| 0 | 0 |
| 1 | 12 |
| 2 | 20 |
| 3 | 26 |
| 4 | 28 |
| 5 | 26 |

|  |  |
| --- | --- |
| **Q good A** | **TUA** |
| 0 | 0 |
| 1 | 12 |
| 2 | 20 |
| 3 | 26 |
| 4 | 28 |
| 5 | 30 |

|  |  |
| --- | --- |
| **Q good A** | **TUA** |
| 0 | 0 |
| 1 | 6 |
| 2 | 10 |
| 3 | 13 |
| 4 | 14 |
| 5 | 13 |

|  |  |
| --- | --- |
| **Q good A** | **TUA** |
| 0 | 0 |
| 1 | 10 |
| 2 | 20 |
| 3 | 30 |
| 4 | 20 |
| 5 | 10 |