Labor markets





MP = ch TP / ch Ql

MRP = ch TR / ch Ql

MRC = ch TC / ch Ql

VMP = P x MP

**Comp / Comp W = 20**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Quantity of****Labor** | **TP****(quantity produced)** | **MP** | **Product Price** | **TR** | **MRP** | **Wage** | **TC****(total labor cost)** | **MRC** | **VMP****(PxMP)** |
| 0 |  0 | - | $ 2 | $ 0 | - | 20 |  0 | - | - |
| 1 |  40 | 40 |  2 |  80 | 80 | 20 |  20 | 20 | 80 |
| 2 |  70 | 30 |  2 | 140 | 60 | 20 |  40 | 20 | 60 |
| 3 |  90 | 20 |  2 | 180 | 40 | 20 |  60 | 20 | 40 |
| 4 | 100 | 10 |  2 | 200 | 20 | 20 |  80 | 20 | 20 |
| 5 | 100 |  0 |  2 | 200 |  0 | 20 | 100 | 20 |  0 |

**Comp / Comp W = 40**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Quantity of****Labor** | **TP****(quantity produced)** | **MP** | **Product Price** | **TR** | **MRP** | **Wage** | **TC****(total labor cost)** | **MRC** | **VMP****(PxMP)** |
| 0 |  0 | - | $ 2 | $ 0 | - | 40 |  0 | - | - |
| 1 |  40 | 40 |  2 |  80 | 80 | 40 |  40 | 40 | 80 |
| 2 |  70 | 30 |  2 | 140 | 60 | 40 |  80 | 40 | 60 |
| 3 |  90 | 20 |  2 | 180 | 40 | 40 | 120 | 40 | 40 |
| 4 | 100 | 10 |  2 | 200 | 20 | 40 | 160 | 40 | 20 |
| 5 | 100 |  0 |  2 | 200 |  0 | 40 | 200 | 40 |  0 |

**Comp / Comp W = 60**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Quantity of****Labor** | **TP****(quantity produced)** | **MP** | **Product Price** | **TR** | **MRP** | **Wage** | **TC****(total labor cost)** | **MRC** | **VMP****(PxMP)** |
| 0 |  0 | - | $ 2 | $ 0 | - | 60 |  0 | - | - |
| 1 |  40 | 40 |  2 |  80 | 80 | 60 |  60 | 60 | 80 |
| 2 |  70 | 30 |  2 | 140 | 60 | 60 | 120 | 60 | 60 |
| 3 |  90 | 20 |  2 | 180 | 40 | 60 | 180 | 60 | 40 |
| 4 | 100 | 10 |  2 | 200 | 20 | 60 | 240 | 60 | 20 |
| 5 | 100 |  0 |  2 | 200 |  0 | 60 | 300 | 60 |  0 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Quantity of****Labor** | **TP****(quantity produced)** | **MP** | **Product Price** | **TR** | **MRP** |
| 0 |  0 | - | $ 2 |  |  |
| 1 |  40 | 40 |  2 |   |  |
| 2 |  70 | 30 |  2 |  |  |
| 3 |  90 | 20 |  2 |  |  |
| 4 | 100 | 10 |  2 |  |  |
| 5 | 100 |  0 |  2 |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Quantity of****Labor** | **TP****(quantity produced)** | **MP** | **Product Price** | **TR** | **MRP** |
| 0 |  0 | - | $ 2 | $ 0 | - |
| 1 |  40 | 40 |  2 |  80 | 80 |
| 2 |  70 | 30 |  2 | 140 | 60 |
| 3 |  90 | 20 |  2 | 180 | 40 |
| 4 | 100 | 10 |  2 | 200 | 20 |
| 5 | 100 |  0 |  2 | 200 |  0 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Quantity of****Labor** | **TP****(quantity produced)** | **MP** | **Product Price** | **TR** | **MRP** | **Wage** | **TC****(total labor cost)** | **MRC** |
| 0 |  0 | - | $ 2 | $ 0 | - | 20 |   | - |
| 1 |  40 | 40 |  2 |  80 | 80 | 20 |   |  |
| 2 |  70 | 30 |  2 | 140 | 60 | 20 |   |  |
| 3 |  90 | 20 |  2 | 180 | 40 | 20 |   |  |
| 4 | 100 | 10 |  2 | 200 | 20 | 20 |   |  |
| 5 | 100 |  0 |  2 | 200 |  0 | 20 |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Quantity of****Labor** | **TP****(quantity produced)** | **MP** | **Product Price** | **TR** | **MRP** | **Wage** | **TC****(total labor cost)** | **MRC** |
| 0 |  0 | - | $ 2 | $ 0 | - | 20 |  0 | - |
| 1 |  40 | 40 |  2 |  80 | 80 | 20 |  20 | 20 |
| 2 |  70 | 30 |  2 | 140 | 60 | 20 |  40 | 20 |
| 3 |  90 | 20 |  2 | 180 | 40 | 20 |  60 | 20 |
| 4 | 100 | 10 |  2 | 200 | 20 | 20 |  80 | 20 |
| 5 | 100 |  0 |  2 | 200 |  0 | 20 | 100 | 20 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Quantity of****Labor** | **TP****(quantity produced)** | **MP** | **Product Price** | **TR** | **MRP** | **Wage** | **TC****(total labor cost)** | **MRC** | **VMP****(PxMP)** |
| 0 |  0 | - | $ 2 | $ 0 | - | 20 |  0 | - | - |
| 1 |  40 |  |  2 |  80 | 80 | 20 |  20 | 20 |  |
| 2 |  70 |  |  2 | 140 | 60 | 20 |  40 | 20 |  |
| 3 |  90 |  |  2 | 180 | 40 | 20 |  60 | 20 |  |
| 4 | 100 |  |  2 | 200 | 20 | 20 |  80 | 20 |  |
| 5 | 100 |  |  2 | 200 |  0 | 20 | 100 | 20 |  |

**Comp / Imperfect Comp**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Quantity of****Labor** | **TP****(quantity produced)** | **MP** | **Product Price** | **TR** | **MRP** | **Wage** | **TC****(total labor cost)** | **MRC** | **VMP****(PxMP)** |
| 0 |  0 | - | $ 3.00 | $ 0 | - | 20 |  0 | - | - |
| 1 |  40 | 40 |  2.88 | 115 |  115 | 20 |  20 | 20 | 115 |
| 2 |  70 | 30 |  2.54 | 178 |  63 | 20 |  40 | 20 | 76.20 |
| 3 |  90 | 20 |  2.20 | 198 |  20 | 20 |  60 | 20 | 44 |
| 4 | 100 | 10 |  2.00 | 200 |  2 | 20 |  80 | 20 | 20 |

**Monopsony**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Quantity of****Labor** | **TP****(quantity produced)** | **MP** | **Product Price** | **TR** | **MRP** | **Wage** | **TC****(total labor cost)** | **MRC** | **VMP****(PxMP)** |
| 0 |  0 | - | $ 2 | $ 0 | - | 10 |  0 | - | - |
| 1 |  40 | 40 |  2 |  80 | 80 | 12.5 |  12.5 |  12.5 | 80 |
| 2 |  70 | 30 |  2 | 140 | 60 | 15 |  30 |  17.5 | 60 |
| 3 |  90 | 20 |  2 | 180 | 40 | 17.5 |  52.5 |  **40** | 40 |
| 4 | 100 | 10 |  2 | 200 | 20 | 20 |  80 |  27.5 | 20 |
| 5 | 100 |  0 |  2 | 200 |  0 | 22.5 | 112.5 |  32.5 |  0 |



**Monopsony**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Quantity of****Labor** | **TP****(quantity produced)** | **MP** | **Product Price** | **TR** | **MRP** | **Wage** | **TC****(total labor cost)** | **MRC** | **VMP****(PxMP)** |
| 0 |  0 |  - |  $ 1 | $ 0 |  - | 2 |  0 |  - |  - |
| 1 |  9 |  9 |  1 |  9 |  9 | 3 |  3 |  3 |  9 |
| 2 |  17 |  8 |  1 |  17 |  8 | 4 |  8 |  5 |  8 |
| 3 |  24 |  7 |  1 |  24 |  7 | 5 |  15 |  7 |  7 |
| 4 |  30 |  6 |  1 |  30 |  6 | 6 |  24 |  9 |  6 |
| 5 |  35 |  5 |  1 |  35 |  5 | 7 |  35 |  11 |  5 |

**Monopsony calc MRC**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Quantity of****Labor** | **TP****(quantity produced)** | **MP** | **Product Price** | **TR** | **MRP** | **Wage** | **TC****(total labor cost)** | **MRC** | **VMP****(PxMP)** |
| 0 |  0 |  - |  $ 1 | $ 0 |  - | 2 |   |  - |  - |
| 1 |  9 |  9 |  1 |  9 |  9 | 3 |   |   |  9 |
| 2 |  17 |  8 |  1 |  17 |  8 | 4 |   |   |  8 |
| 3 |  24 |  7 |  1 |  24 |  7 | 5 |   |   |  7 |
| 4 |  30 |  6 |  1 |  30 |  6 | 6 |   |   |  6 |
| 5 |  35 |  5 |  1 |  35 |  5 | 7 |   |   |  5 |



Yp: 