Customer: Barney Corporation adds materials at the beginning of the process in Department AX. The conversion costs were 75% complete as to the 21,280 units in WIP on April 30 and 45% complete as to the 14,400 units in WIP on May 31. During May, 55,980 units were completed and transferred to the next department. An analysis of the costs relating to WIP at May 1 and to production activity for May is as follows:

Direct Materials Conversion

WIP, May 1 $18,908 $11,172

Costs added in May $76,105 $32,550

Solution:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | *Equivalent units of production* |  |  |  |
|  |  | *Materials* | *Conversion* |  |
|  | Transferred to next department | 55980 | 55980 |  |
|  | Ending work in process (materials: 14400 units × 100% complete; conversion: 14400 units × 45% complete) | 14400 | 6480 |  |
|  | Equivalent units of production | 70380 | 62460 |  |
|  |  |  |  |  |
|  | *Cost per Equivalent Unit* |  |  |  |
|  |  | *Materials* | *Conversion* | *Total* |
|  | Cost of beginning work in process | $18908 | $ 11172 |  |
|  | Cost added during the period | 76105 | 32550 |  |
|  | Total cost (a) | 95013 | 43722 |  |
|  |  |  |  |  |
|  | Equivalent units of production (b) | 70380 | 62460 |  |
|  | Cost per equivalent unit | $$1.35 | $.70 | $2.05 |