

## Chapter 18: Spoilage, Rework and Scrap Class Examples

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ABC Company manufactures widgets and uses a standard process costing system. During production, two different types of materials are used: 100% of material XY is added at the beginning of the production process; 60% of material RT is added halfway through the production process while the remaining 40% is added when the widget is 90% converted. Conversion costs are added uniformly throughout the entire production process. Quality testing is conducted at 90% conversion just prior to adding the remaining amount of material RT and rejected units are accounted for as spoilage. For Year 5, the standard costs per equivalent unit for material XY, material RT and conversion costs are \$15.00, \$21.00 and \$9.00, respectively. Production data for May Year 5 is as follows:

Work in process inventory, May 1, Year 5 (95% converted)	5,500 units
Started in production	8,800 units
Completed production	9,100 units
Work in process inventory, May 31, Year 5 (60% converted)	5,000 units

1. The amount of spoilage costs for May is:

- a) \$ 7,140.
- b) \$ 9,000.
- c) \$10,710.
- d) \$ 8,820.
- e) \$ 7,320.

2. The value of work-in-process inventory at May 31 is:

- a) \$225,000.
- b) \$165,000.
- c) \$207,000.
- d) \$183,000.
- e) \$161,250.

3. HEB Ltd. manufactures widgets. In the production of the widgets, two different types of materials are used: 100% of Material K is added at the beginning of the production process; 100% of Material Z is added when the widget is 60% converted. Conversion costs are added uniformly throughout the entire production process. Quality testing is conducted at the 60% conversion point prior to adding Material Z. Rejected units at quality testing are accounted for as spoilage.

Production data for June, Year 15, are as follows:

Work-in-process inventory, June 1, Year 15 (50% converted)	600 units
Started in production	8,900 units
Completed production	9,100 units
Work-in-process inventory, June 30, Year 15 (90% converted)	250 units

Assume HEB Ltd. uses a first-in, first-out (FIFO) process costing system. The equivalent units of production for conversion costs for June are

- a) 8,965.
- b) 9,415.
- c) 9,115
- d) 9,500.
- e) 9,175.