

Bandit Dog Food uses the FIFO process costing method of accounting for production. Three primary ingredients included in each blend are vitamins, beef, and grain. Other components like food coloring and salt are insignificant in cost and are considered as indirect material elements in establishing the overhead allocation formulas. Factory overhead is applied on the basis of direct labor cost. The entire production process is completed within one department. All raw material is introduced at the beginning of the production process, while conversion costs occur uniformly throughout the production cycle.

Beginning work in process, at February 1, consisted of 90,000 pounds that were 80% complete, and had assigned costs as follows:

Direct material	\$	45,000
Direct labor		20,000
Factory overhead		15,000

February's production cycle resulted in the introduction of an additional 340,000 pounds. At the end of February, 100,000 pounds were still in process, and were judged to be 40% complete. The cost of raw materials introduced during the month of February had the same per pound cost as the goods in beginning inventory.

Direct labor on the February cost of production report (FIFO method) revealed additional costs during the month of \$72,500. The factory overhead application rate was consistent with that evident in the beginning work in process.

Finished goods inventory increased by \$9,844, and sales were \$500,000.

- (a) How many units were transferred to finished goods?
- (b) What are February's equivalent units of production for direct materials, direct labor, and factory overhead?
- (c) How much was the cost of direct material introduced into production during February?
- (d) What is the cost per equivalent unit for labor during February?
- (e) What is the factory overhead application rate?
- (f) Of the total cost (beginning inventory plus additional production cost), how much is allocated to ending work in process?
- (g) Of the total cost (beginning inventory plus additional production cost), how much is transferred to finished goods inventory?
- (h) How much is February's gross profit?