Comparing Three Depreciation Methods

Dexter Industries purchased packaging equipment on January 8 for $368,400. The equipment was expected to have a useful life of four years, or 5,200 operating hours, and a residual value of $30,400. The equipment was used for 1,820 hours during Year 1, 1,092 hours in Year 2, 1,456 hours in Year 3, and 832 hours in Year 4.

Required:

1. Determine the amount of depreciation expense for the four years ending December 31 by (a) the straight-line method, (b) the units-of-activity method, and (c) the double-declining-balance method. Also determine the total depreciation expense for the four years by each method. **Round the answer for each year to the nearest whole dollar.**

	Depreciation Expense		
Year	**Straight-Line Method**	**Units-of-Activity Method**	**Double-Declining-Balance Method**
Year 1	$ 90,800 ✗	$ 128,940 ✗	$ 184,200 ✓
Year 2	$ 90,800 ✗	$ 77,364 ✗	$ 45,400 ✗
Year 3	$ 90,800 ✗	$ 103,152 ✗	$ 45,400 ✗
Year 4	$ 90,800 ✗	$ 58,944 ✗	$ 93,400 ✗
Total	$ 368,400 ✗	$ 368,400 ✗	$ 368,400 ✗

2. What method yields the highest depreciation expense for Year 1?

Double-declining-balance method ✓

3. What method yields the most depreciation over the four-year life of the equipment?

All three depreciation methods ✓