PROBLEM 12–12A Basic Net Present Value Analysis (LO1)

The Confectioner's Corner Inc. would like to buy a new machine that automatically dips chocolates. The dipping operation is currently done largely by hand. The machine the company is considering costs $100,000. The machine would be usable for 10 years but would require the replacement of several key parts at the end of the fifth year. These parts would cost $7,000, including installation. After 10 years, the machine could be sold for $6,000.

The company estimates that the cost to operate the machine will be $6,500 per year. The present method of dipping chocolates costs $24,000 per year. In addition to reducing costs, the new machine will increase production by 5,500 boxes of chocolates per year. The company realizes a contribution margin of $2.10 per box. An 18% rate of return is required on all investments.

CHECK FIGURE
(2) $28,638 net present value

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Required:

1. What are the net annual cash inflows that will be provided by the new dipping machine?
2. Compute the new machine's net present value. Use the incremental cost approach and round all dollar amounts to the nearest whole dollar.