Worksheet A: Answer Guide

A. Materials and Impact on Landfill

Question 1:
55% of the steel will end up going to the landfill. This means that 11 pounds of steel will end up in the landfill.

\[20 \text{ pounds} \times 0.55 = 11 \text{ pounds}\]

3 pounds of vacuum pack material will end up in the landfill.

Question 2:
85% recycle rate. At this rate, the steel produces 3 pounds of excess material that will end up in the landfill.

\[1 - \frac{3 \text{ pounds}}{20 \text{ pounds}} = 0.85\]

B. Buying in Bulk

Question 1:
Each small box has a surface area of 153 square inches. The 8 boxes have a total of 1224 square inches.

Question 2:
Each large box has a surface area of 342 square inches. The 2 boxes have a total of 684 square inches.