



Problem of the Week Problem A and Solution Holiday Cheer

Problem

Students at Giving Elementary School are spreading holiday cheer this year by collecting donations for families in need within their community. Their goal this year was to collect 2000 items in one week, and they exceeded their goal! The table below shows the number of donations each day during the week.

Day	Number of Items Donated
Monday	392
Tuesday	46
Wednesday	877
Thursday	?
Friday	229

Someone accidentally tore the collection sheet with the data on it, so they don't have the number of items they collected on Thursday. If we know the school exceeded their goal of 2000 items in a week, what is the minimum number of items the students collected on Thursday?

Solution

We start by adding up the number of items for the days we know, and we get 392 + 46 + 877 + 229 = 1544.

Since we know the students exceeded their goal, then they must have collected at least 2001 items in total. Thus, the minimum number of items they collected on Thursday must be 2001 - 1544 = 457.