# 12. Widget Wackiness

Program Name: Widget.java Input File: widget.dat

<commercial> Walter Widgeton here announcing Widget, Inc.'s biggest deal! Bring in five widget wrappers and get one free widget! Don't settle for any old thingamajig! Come on down and buy our widgets for \$2 each!

Given an amount of money, the cost of a widget, and the number of widget wrappers needed to get a free widget, determine the number of total widgets you can acquire.

## Input

- The first line will contain a single integer n that indicates the number of data sets to follow.
- Each data set will consist of a line containing three integers, m, c, w, with:
  - $\circ$  m = the amount of money in dollars you have,  $0 \le m \le 100$ ,  $c = the cost in dollars of a single widget, <math>1 \le c \le 100$
  - o w= the number of widget wrappers you can trade in to receive a free widget, 2 <= w <= 100

Note that all widgets, purchased or free, are in wrappers.

#### Output

For each data set in the input, output a single line "X", where X is the number of widgets you can acquire by continually trading in wrappers for widgets until you have redeemed as many wrappers as possible.

## **Example Input File**

## **Example Output to Screen**

6 9 37