Problem 4—Farkel Roll

Professor Plum likes to play the dice game Farkel, so he is trying to teach a Computer Science colleague to play.

A player's turn consists of an initial roll of 6 six-sided dice. The player removes the dice they want to use for points on that roll. The player can decide to stop or reroll the remaining dice. If the player rerolls the remaining dice and does not score any points, then the player loses all their points for that turn (called a *Farkel*). If the player stops, the points for all the rolls in that turn are added to their total score.

Professor Plum wants you to develop a training program for scoring a single (re)roll within a turn. The (re)roll could consist of between 1 to 6 dice with the program returning the maximum score for the (re)rolled dice. In Farkel scoring only ONES and FIVES can count individually, but other dice can count in the following combinations:

ONES are 100 points each	FIVES are 50 points each
3 ONES are 300 points	4 of any kind is 1000 points
3 TWOS are 200 points	5 of any kind is 2000 points
3 THREES are 300 points	6 of any kind is 3000 points
3 FOURS are 400 points	Straight ONE to SIX is 1500 points
3 FIVES are 500 points	Three pairs is 1500 points
3 SIXES are 600 points	Two Triplets is 2500 points

Some sample (re)rolls and their corresponding scores are:

(Re)roll Dice	Score	Comments
1 1 3 5	250	Two ONES (2 x 100) plus a single FIVE (1 x 50)
1 5 5 5 6	600	Single ONE (100) plus 3 FIVES for 500
2 2 3 4 6 6	0	Nothing counts for points – this is called a "Farkel"
2 2 2 2 4 5	1050	4 TWOS (1000) plus a single FIVE for 50
5 6	50	Single FIVE for 50
1	100	Single ONE for 100

INPUT SPECIFICATION

Each line of input contains between 1 and 6 dice values for a single (re)roll separated by whitespace. **The dice values on a line are NOT sorted as in the above examples.**

OUTPUT SPECIFICATION

The output should contain one line of output corresponding to each line of input. Each output line echos the dice values sorted in ascending order, an equal sign (" = ") with a single space on each side, and the score for the (re)roll.

SAMPLE INPUT

```
1 5 3 1
6 5
4 3 2 6 2 6
5
```

SAMPLE OUTPUT

```
1 1 3 5 = 250
5 6 = 50
2 2 3 4 6 6 = 0
5 = 50
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