

## Problem

Ye Ming has just won a Canadian Falcon points card which gives her points towards free clothes.

- If she spends \$5 in one of their stores, she gets one point.
- A \$10 purchase gives two additional points (i.e., three in total).
- A \$15 purchase gives another four additional points.

A new pair of jeans requires 350 points. How much money does Ye Ming have to spend in order to receive a total of 350 points? Is it worth it? Justify your answer.



**Hints**

**Hint 1** - How many points will Ye Ming have if she spends \$15?

**Hint 2** - How many \$15 purchases would Ye Ming need to make to receive 350 points?

**Solution**

Ye Ming gets 1 point for spending \$5,  $1 + 2 = 3$  points for spending \$10, and  $3 + 4 = 7$  points for spending \$15. Since  $350 \text{ points} = 50 \times 7 \text{ points}$ , to get the jeans, she would have to spend  $50 \times \$15 = \$750$ . Most 'tweens' would judge that to be not worth it!