



Problem of the Week

Problem A and Solution

Movie Magic

Problem

Comfort and her family are planning to see a movie on the weekend. Comfort is 9 years old. Her twin brothers, who are 5 years older than Comfort, and both her parents will be going to the movie. The prices for tickets, including all taxes, are:

- Adults: \$14 each
- Children between 12 and 18: \$12 each
- Children under 12: \$8 each

They have a gift card worth \$25 that they can use to pay for part of the cost of the movie tickets. How much more money do they need to pay for the tickets for the entire family? Justify your answer.

Solution

Since Comfort is 9 years old and her twin brothers are 5 years older, they are both $9 + 5 = 14$ years old. (Note that depending on when their birthdays are exactly, the brothers might actually be 13 or 15 at the time. However, their age would definitely be between 12 and 18.)

So, Comfort's ticket will cost \$8.

Comfort's brothers' tickets will cost \$12 each.

Comfort's parents' tickets will cost \$14 each.

The total cost for the family will then be $\$8 + \$12 + \$12 + \$14 + \$14 = \60 .

Since they have a \$25 gift card, they will need to pay $\$60 - \$25 = \$35$ more for the tickets for the entire family.