

Love is in the air

Everyday, from 1st February - 14th February (inclusive), Will buys Kate a gift. Each day, the amount of money he spends on the gift is equal to the date (for example, on 6th February he spends £6), except when the date is a prime number, then he spends 50% more.



a) How much money will he need to buy all 14 gifts?

Will only has £100 so he needs to do some jobs for the Queen to make up the difference.



b) How much money does he need to make?

The Queen has 2 dogs, Vulcan and Candy, which need walking regularly. The Queen tells Will that she will pay him 75p per dog per walk. Will takes both dogs on a dozen walks.



c) How much money does Will earn walking Vulcan and Candy?



To make up the extra amount of money Will needs to buy all 14 gifts, he cleans (2^3-2) of the Queen's royal carriages.

d) How much did the Queen pay Will to clean each carriage?

