

- (1) A virus spreads at a rapid pace. On the first day, 4 000 people were infected by the virus. Each consecutive day the number of infections doubled. How many infections were recorded within a week?

- (2) The sum of the areas of a series of squares is calculated. The first square has a side length of 16 cm. Each consecutive square’s side length is half of the previous square’s side length. Write down the areas of the first five squares.

- (a) The sum of the areas of a series of squares is calculated. The first square has a side length

- (b) Calculate the area of the 15th square in the series.

- (c) Calculate the sum areas of the first 10 squares. [Correct to 2 decimals.]

(d) Calculate the maximum total area of all the squares in the series.
