EXERCISE 14.1   **PAGE NO: 324**

1.Which of the following sentences are statements? Give reasons for your answer.
(i) There are 35 days in a month.
(ii) Mathematics is difficult.
(iii) The sum of 5 and 7 is greater than 10.
(iv) The square of a number is an even number.
(v) The sides of a quadrilateral have equal length.
(vi) Answer this question.
(vii) The product of (–1) and 8 is 8.
(viii) The sum of all interior angles of a triangle is 180°.
(ix) Today is a windy day.
(x) All real numbers are complex numbers.
Solution:
(i) The maximum number of days in a month is 31, so this sentence is incorrect.
Therefore it is a statement
(ii) This sentence is subjective. For some people, Mathematics can be easy and for some
others it can be difficult. Therefore it is not a statement
(iii) The sum of 5 and 7 is 12 and it is greater than 10. Therefore this sentence is always
correct. Hence, it is a statement
(iv) This sentence can be sometimes correct and sometimes incorrect. For example, the
square of 2 is even number but the square of 3 is odd number. Hence, it is not a statement
(v) This sentence can be sometimes correct and sometimes incorrect. For example, square
and rhombus have sides of equal lengths whereas trapezium and rectangle have sides of
unequal lengths. Therefore it is not a statement
(vi) It is an order. Hence, it is not a statement
(vii) The given sentence is incorrect because the product of (-1) and 8 is – 8. Hence, it is
a statement
(viii) The given sentence is correct and therefore, it is a statement
(ix) The given sentence is not a statement because the day that is being referred to is not
evident from the sentence.
(x) The given sentence is always correct because all real numbers can be written as a × 1
+ 0 × i. Hence, it is a statement.

**2. Give three examples of sentences which are not statements. Give reasons for the
answers.**
Solution:
The three examples of sentences, which are not statements are given below:
(i) He is a doctor
In the given sentence, it is not evident as to whom 'he' is referred to. Hence, it is not **a**

statement

(ii) Geometry is difficult

For some people, geometry can be easy and for some others, it can be difficult. Hence, this is not a statement

(iii) Where is she going?

In this question, it is not evident as whom 'she' is referred to. Hence, it is not a statement