

3 A computer stores images and text files.

(a) One of the images is a bitmapped image.

Complete the table by writing the answer for each statement.

Statement	Answer
the term for the smallest element that makes up an image	
the largest number of different colours that can be represented with a bit depth of 8 bits	
the term for the dots per inch (dpi) when an image is displayed	

[3]

(b) The text in the files is stored using the Unicode character set.

(i) Give **two** advantages of using the Unicode character set instead of using the ASCII character set.

1 .....

.....

2 .....

.....

[2]

(ii) The Unicode character 'κ' has the binary value: 0010 0111 0110 1110

Convert the binary value for the character 'κ' into denary.

..... [1]

(iii) The Unicode character 'Σ' has the hexadecimal value 2140

Convert the hexadecimal code for the character 'Σ' into denary.

..... [1]