01 Figure 1 shows four statements about how image files are stored on a computer.

Tick **two** boxes to indicate the correct statements.

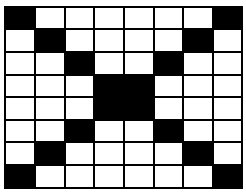
[2 marks]

Figure 1

Statement	Tick two boxes
Image files need to be compressed to be stored on a computer	
Image files are always stored on a computer using binary	Tick
Images always take up less space to store than sound files	
Images must be broken into individual picture elements to allow them to be stored on a computer	Tick

02 Figure 2 shows an 8 x 8 black and white bitmap image.

Figure 2



02.1 State the meaning of the term colour depth as it applies to bitmap images such as the one shown in **Figure 2**.

[1 mark]

number of bits needed to store (colour data about) each pixel

02.2 What is the file size of the image shown in **Figure 2**? Your answer should be given in **bits**.

You should show your working.

[2 marks]

8 x 8 x 1 – credit [1] for any sensible multiplication

Answer: 64

02.3 Explain why adding a third colour to the image in **Figure 2** would increase the file size.

[1 mark]

Any of:

- Because the colour depth increases [1]
- Because the amount of data needed to store each pixel increases [1]
- Because 2 bits rather than 1 bit are needed to store each pixel [1]