



Write a TRUTH TABLE for an OR gate.	If an image's size was 25×25 pixels (resolution) and its colour depth was 16 bit (16 bits used to determine the colour of each pixel), what would its file size be?	What is meant by iterative testing?
Describe the purpose of formatting software.	Describe what 'Denial of Service Attacks (DoS) are.	What is 'packet switching'?



Write a TRUTH TABLE for an OR gate.

A	B	Q
1	1	1
1	0	1
0	1	1
0	0	0

If an image's size was 25×25 pixels (resolution) and its colour depth was 16 bit (16 bits used to determine the colour of each pixel), what would its file size be?

$$25 \times 25 \text{ pixels} = 625 \text{ pixels}$$

$$16 \text{ bit colour depth } 16 \text{ bits per pixel}$$

$$625 \times 16 = 10000 \text{ bits}$$

$$\text{File size} = 10000 \text{ bits}$$

$$\text{In bytes} = 10000 / 8 = 1250 \text{ bytes}$$

$$\text{In kilobytes} = 1250 / 1000 = 1.25 \text{ kb}$$

$$\text{In megabytes} = 1250 / 1000000 = 0.00125 \text{ mb}$$

What is meant by iterative testing?

When programs are repeatedly tested during development.

Describe the purpose of formatting software.

Formatting prepares the storage device for data storage. It creates sectors and tracks on which data can be stored. It also creates a special list called the File Allocation Table (FAT).

Describe what 'Denial of Service Attacks (DoS) are.

Denial of Service attacks seek to bring down websites by using up the web server's resources.

What is 'packet switching'?

Packet switching is where data packets are routed to their destination as fast as possible – this may not be the shortest distance however.