

Monthly Test : Grade 8 :

1).What is the primary difference between a bitmap image and a vector image?

- a) Bitmap images are made of pixels, while vector images are made of paths or mathematical formulas.
- b) Bitmap images use fewer colors than vector images.
- c) Vector images are pixel-based, while bitmap images use paths.
- d) Bitmap images are scalable, while vector images are not.

2). Which of the following is a typical file format for a bitmap image?

- a) .svg
- b) .png
- c) .eps
- d) .ai

3).Which image type loses quality when zoomed in?

- a) Bitmap
- b) Vector

4). Use below instructions to draw a Vector image on a 10 x 10 grid.

Graphic 2:

Blue car body:

X1,Y3; X1,Y8; X8,Y8

X9,Y6; X10,Y5; X10,Y3

White window:

X5,Y6; X5,Y7; X7,Y7; X8,Y6

Black wheel 1:

X3,Y3,R1

Black wheel 2:

X8,Y3,R1

5). What does the term *gradient* refer to in graphic design?

- A.** A pattern made of repeating shapes and lines
- B.** A gradual transition between two or more colors or shades
- C.** A solid color used as a background
- D.** A texture applied to an object to create depth

6). What is the resolution of an image that has 1000 pixels in width and 500 pixels in height?

- A.** 500,000 pixels
- B.** 1,000,000 pixels
- C.** 1000 x 500 pixels
- D.** 500 x 1000 pixels

7). Which of the following factors increase as the number of pixels in an image increases?

- A.** Resolution
- B.** Image Quality
- C.** File Size
- D.** All of the above

8). What is the unit of pixel resolution used to create an image?

- A.** Pixels per centimeter (PPC)
- B.** Pixels per inch (PPI)
- C.** Pixels per meter (PPM)
- D.** Pixels per millimeter (PPMM)

9). What is the typical screen resolution of an 8K display?

- A.** 3840 × 2160 pixels
- B.** 2560 × 1440 pixels
- C.** 1920 × 1080 pixels
- D.** 7680 × 4320 pixels

10). What is a binary word?

- A. A sequence of hexadecimal digits used in computing
- B. An arrangement of characters used in text processing
- C. A collection of 1s and 0s grouped together for a purpose
- D. A collection of letters and numbers grouped together for a purpose

11). Apply the Binary word below on 4 x 4 grid and create the Binary image.

Binary Word : **1110101000111110**

12). Explain the term “1-Bit Binary Image” , Use a diagram to explain

13). Explain the term “2-Bit Binary Image” , Use a diagram to explain

14). Which software from the Adobe Creative Suite is used for creating vector graphics?

- A. Illustrator
- B. Photoshop
- C. InDesign
- D. Lightroom

15).What is “Color Depth” ?

16).What is the Unit of Color Depth ?

17). Fill the below table.

Number of bits per pixel	Number of possible colours
1	2
2	4
	8
4	
	32
6	
	128
8	

18). Explain about 32-color image

19). If an image has 4096 individual colors, how many bits are in one pixel?

20). If an image has 16384 individual colors, how many bits are in one pixel?

21). What is the maximum number of colors a 24-bit True Colour display can show?

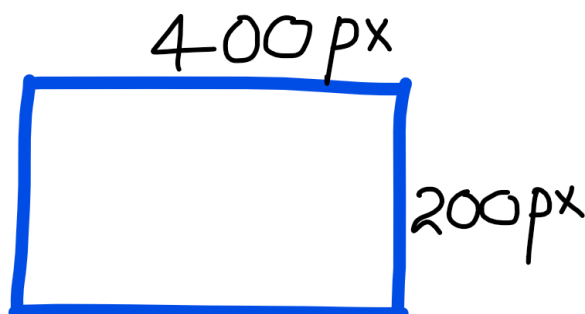
A. 256

B. 65,536

C. 16,777,216

D. 1,048,576

22). If the color depth is 5 find the file size of below image in Bits and Bytes.



23). You are given an image of having 500px x 100 px and color depth is 16. Then what is the file size in **Kilobytes**