

Related numericals and formulas :

1. How Many k bytes does a frame buffer need in a 600 x 400 pixel ?

Ans. Resolution is 600 x 400

Suppose 1 pixel can store n bits

Then, the size of frame buffer = Resolution X bits per pixel

$$= (600 \times 400) \times n \text{ bits}$$

$$= 240000 \text{ n bits}$$

$$= 240000 \text{ n (as 1kb = 1024 bites) } 1024 \times 8$$

$$= 29.30 \text{ n k bytes}$$

2. Find out the aspect ratio of the raster system using 8 x 10 inches screen and 100 pixel/inch. Ans. We know that,

$$\text{Aspect ratio} = \text{Width} / \text{Height} = 8 / 10 = 4 / 5 \quad \text{Aspect ratio} = 4 : 5$$

3. The access time per pixel = 1/ access rate.

4. Access rate = Resolution * No of frames