

1. How many bits does it take to represent the values from 0 to 255?  
8
2. How many bytes does it take to represent a color in the RGB color model?  
3
3. How many pixels are in a picture that is 640 pixels wide and 480 pixels high?  
307200

1. How can you make pink?  
255 192 203
2. How can you make yellow?  
255 255 0
3. How can you make purple?  
128 0 128
4. How can you make white?  
255 255 255
5. How can you make dark gray?  
169 169 169

1. What is the row index for the top left corner of the picture?  
0
2. What is the column index for the top left corner of the picture?  
0
3. The width of this picture is 640. What is the right most column index?  
639
4. The height of this picture is 480. What is the bottom most row index?  
479
5. Does the row index increase from left to right or top to bottom?  
Top to bottom
6. Does the column index increase from left to right or top to bottom?  
Left to right
7. Set the zoom to 500%. Can you see squares of color? This is called pixelation. Pixelation means displaying a picture so magnified that the individual pixels look like small squares.  
Yes

1. Open Picture.java and look for the method getPixels2D. Is it there?  
no
2. Open SimplePicture.java and look for the method getPixels2D. Is it there?  
yes

3. Does the following code compile?

```
DigitalPicture p = new DigitalPicture();
```

no

4. Assuming that a no-argument constructor exists for SimplePicture, would the following code compile?

```
DigitalPicture p = new SimplePicture();
```

no

5. Assuming that a no-argument constructor exists for Picture, does the following code compile?

```
DigitalPicture p = new Picture();
```

no

6. Assuming that a no-argument constructor exists for Picture, does the following code compile?

```
SimplePicture p = new Picture();
```

no

7. Assuming that a no-argument constructor exists for SimplePicture, does the following code compile?

```
Picture p = new SimplePicture();
```

yes