

1. The resolution measures:

- the audio quantity
- the audio quality
- the video quantity
- the video quality

2. The sampling measures:

- the audio quantity
- the audio quality
- the video quantity
- the video quality

3. The quantisation measures:

- the audio quantity
- the audio quality
- the video quantity
- the video quality

4. The bit depth measures:

- the audio quantity
- the audio quality
- the video quantity
- the video quality

5. The file size reduction from 4:4:4 sampling to 4:2:0 subsampling is:

- $\frac{1}{4}$
- $\frac{1}{3}$
- $\frac{1}{2}$
- $\frac{3}{4}$

6. By choosing a sampling rate of 96 kHz rather than 48 kHz we get:

- same size and double information
- double size and double information
- same size and same information
- double size and same information

7. **By choosing a bit depth of 12 per channel rather than 8 we get:**
- 50 % bigger files and 50 % better quality
 - 1600 % bigger files and 50 % better quality
 - 50 % bigger files and 1600 % better quality
 - 1600 % bigger files and 1600 % better quality
8. **A typical lossless compression rate is:**
- 1.5 : 1
 - 2 : 1
 - 2.5 : 1
 - 3 : 1
9. **The current Bayer sensors only generate an incomplete RGB image:**
- $\frac{1}{3}$ red, $\frac{1}{3}$ green and $\frac{1}{3}$ blue
 - $\frac{1}{2}$ red, $\frac{1}{4}$ green and $\frac{1}{4}$ blue
 - $\frac{1}{4}$ red, $\frac{1}{2}$ green and $\frac{1}{4}$ blue
 - $\frac{1}{4}$ red, $\frac{1}{4}$ green and $\frac{1}{2}$ blue
10. **The steps for file format transformations are:**
- decode → demultiplex → filter → multiplex → encode
 - demultiplex → decode → filter → multiplex → encode
 - demultiplex → decode → filter → encode → multiplex
 - decode → demultiplex → filter → encode → multiplex
11. **Digital video is based on the following colour model:**
- R'G'B'
 - Y'UV
 - Y'IQ
 - Y'C_BC_R
12. **The raw video data format “rgb48le” can hold the same image quality as:**
- yuv422p10le
 - yuv444p16le
 - bayer_bggr16le
 - rgb24