

**1. The resolution is a:**

- quantitative audio measure
- measure of the audio quality
- quantitative video measure
- measure of the video quality

**2. The sampling rate is a:**

- quantitative audio measure
- measure of the audio quality
- quantitative video measure
- measure of the video quality

**3. The quantisation is a:**

- quantitative audio measure
- measure of the audio quality
- quantitative video measure
- measure of the video quality

**4. The bit depth is a:**

- quantitative audio measure
- measure of the audio quality
- quantitative video measure
- measure of 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<sub>B</sub>C<sub>R</sub>
12. **The raw video data format “rgb48le” can hold the same image quality as:**
- yuv422p10le
  - yuv444p16le
  - bayer\_bggr16le
  - rgb24