

Lesson 5

PT 101 Lesson 4 Review / Discussion Questions - Answers: *Yellow is my original answers Green is the changes*

1. How much disk space is consumed per minute by a mono track at a sample rate of 44.1 kHz and a bit depth of 16-bit? What happens to disk space consumption if the sample rate is doubled to 88.2 kHz with the same bit depth? (See "audio storage requirements" beginning on page 96.)

approximately 5 megabytes (MB) of storage per minute for 16-bit audio (mono). With increasing bit depth and sample rates, drive consumption increases correspondingly; recording at a sample rate of 88.2 kHz, therefore, consumes twice as much drive space as recording at 44.1 kHz.

2. How can you monitor the storage space available on your system to determine the amount of record time remaining for each mounted drive? (See "disk usage window" beginning on page 97.)

The Disk Usage window shows the number of continuous track minutes available on each mounted hard. drive, using the current session's sample rate and bit depth.

3. How can you create a click track for a session? What kind of track is used for a click track? (See "creating a click track (Optional) " beginning on page 97.

To set up a click track, use the CREATE CLICK TRACK command at the bottom of the TRACK menu. This command inserts the Click II plug-in on a new Aux Input track.

4. What window(s) can you use to record– enable an audio track? (See "record – enabling tracks" beginning on page 100.)

To set up a Pro Tools Audio track for recording, click the track's RECORD ENABLE button in either the Edit window or the Mix window.

5. What selector can you use to route a signal from an input on your audio interface to a track for recording? (See "input path" beginning on page 100.)

Each Audio track has an Audio Input Path selector in the track's I/O section. You'll use this selector to route a signal from an input on your interface to the track for recording.

6. How can you adjust the input level going to a record – enabled track? Can you use the volume fader to achieve a strong signal going to disk? (See "input level" beginning on page 102.)

As a general rule, input levels should be adjusted to obtain a strong, clean signal while avoiding clipping. Unlike when recording to tape, however, you do not need to record at the highest possible level in Pro Tools. Recording too hot can leave little room for subsequent gain-based processing (such as EQ) and can lead to digital clipping, which is always detrimental to audio quality. For best results, aim for an average peak input level of around -6 dBFS or lower, keeping the track meter in the yellow range. To do this, adjust the level of your analog source while monitoring the indicator lights on your onscreen track meter.

7. How can you place a session in Record Ready mode after record-enabling a track? What modifiers/shortcuts are available to initiate recording without first entering Record Ready mode? (See "recording and managing audio" beginning on page 102.)

With your sound sources routed to record-enabled tracks, you are ready to begin recording audio. Pro Tools offers a variety of recording modes that can be used in different audio recording situations. We will use the default mode (Nondestructive Record) for all work done in this course.

8. Where are recorded audio files stored for Pro Tools sessions? (See "organising audio files and clips" beginning on page 103.)

They exist as individual files on your hard drive located in the Session Folder or anywhere on your drive

9. What term is used to describe an unedited audio file in Pro Tools? What term is used to describe the smaller, edited pieces of the original sound file? (See "recognising audio files and clips" beginning on page 104.)

The Clip List in the Edit window lists all subset clips and whole-file clips that have been used in your session. Pro Tools shows all whole-file clips in boldface type and all other clips in normal type. When sound files are recorded onto stereo Audio tracks, the word stereo is shown in parentheses at the end of the file name.

10. What types of clips are represented by boldface text in the clip list? What type is represented by normal (plain) text? (See "recognising audio files and clips" beginning on page 104.)

Pro Tools shows all whole-file clips in boldface type and all other clips in normal type.

11. How do track names affects the default names of the audio files you record in Pro Tools? (See "default naming conventions" beginning on page 105.)

When you record audio on a track, Pro Tools names the resulting file (a whole-file clip) using the name of the track as the base name.

12. Describe two ways to rename an audio file after recording into Pro Tools. (See "changing file and clip names" beginning on page 105.)

Double-click the file or clip in the Edit window (with the GRABBER tool) or in the Clip List. Right-click on the file or clip in the Edit window or Clip List and select RENAME from the pop-up menu.

13. How would you go about removing unwanted audio from the Clip List without deleting the files from disk? (See "removing audio clips" beginning on page 106.)

As the Clip List grows in your session, you might want to periodically remove audio clips you no longer need. in order to reduce clutter. However, because removing audio clips does not delete the audio files, this action will have no effect on drive usage for the session.

14. How would you go about deleting unused whole-file clips to erase from your storage drive? Can this action be undone? (See "moving or deleting audio files" beginning on page 107)

As you work on your session, you may also accumulate unwanted whole-file clips from test recordings or unusable takes. At times, you might want to delete these unneeded audio files from your storage drive. By removing audio files from disk, you can free up additional drive space and reduce the overall storage requirements of your session. In addition to utilizing drive space more effectively, this will also help reduce transfer time for your sessions.