

NAME: _____ DATE: _____

AE-2 Quiz 1: Basic Compression, Studio Design, Pro Tools Setup

(Circle all the letters that apply)

1. What does a Limiter do?

- a.) Reduce peaks (transients)?
- b.) Raise Low-level signals?

2. Which are typical Limiter settings?

- a.) Attack 20mS, Release 200ms, Ratio 2:1
- b.) Attack 2mS, Release 20ms, Ratio 20:1

3. What does a Compressor do?

- a.) Reduce peaks (transients)?
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4. Which are typical Compressor settings?

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- b.) Attack 2mS, Release 20ms, Ratio 20:1

5. What does the side-chain of a dynamics processor do?

- a.) Turn the Audio Signal into a corresponding Control Voltage (CV)
- b.) Allow the Response time (Attack & Release) to be manipulated
- c.) Allow the Ratio to be manipulated

6. What Does an Expander / Gate do?

- a.) Let the cat out of the yard?
- b.) Keep the dog in the yard
- c.) Reduce leakage on drum mics
- d.) Restore the dynamics of over compressed signals
- e.) Reduce noise (hiss and hum)

7. What is another name for High Frequency Limiter
 - a.) Defibrillator
 - b.) Dog whistle
 - c.) Frequency selective processing
 - d.) De-Esser
8. Compressors do one or more of the following to an audio track...
 - a.) make it louder
 - b.) make it sound worse
 - c.) reduce the dynamic range
 - d.) make it louder without creating digital 'overs.'
9. Limiters do one or more of the following to an audio track...
 - a.) make it louder
 - b.) make it sound worse
 - c.) reduce the dynamic range
 - d.) make it louder without creating digital 'overs.'
10. What is a multi-band signal processor and why is it useful?
 - a.) Allows each frequency band to be independently processed
 - b.) Has the potential to fix minor frequency response problems like excessive low-frequency information.
 - c.) A dynamics processor with presets to solves band-specific issues (Metal, Hip-Hop, Trance, Dub-Step, Jazz, Bluegrass).
 - d.) Can be used as a de-esser on a vocal submix
11. What type of material is typically used to create a diffusion panel?
 - a.) Flat surface
 - b.) Rounded surface
 - c.) Uneven or Irregular surface
 - d.) Carpeted Surface?

12. What type of material is typically used to create an Absortion panel?
- a.) Uneven or Irregular surface
 - b.) Carpeted Surface?
 - c.) Fiberglass covered with sonically porous cloth
13. What are two benefits of floating floors, walls, windows, etc. in a studio environment?
- a.) The studio is ready for the next flood
 - b.) Transmission of Sound - from studio to control room and vice versa - is greatly reduced
14. What is the proper order for powering up a Pro Tools HD system including the outboard gear and peripherals?

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15. When designing a studio and running cables, why is it a bad idea to have audio cables and power cables running close to each other?
- a.) When running too close, it is easy to bump elbows
 - b.) Electrical Current flowing through power cables radiates hum and buzz into nearby audio cables.
16. Draw the approximate frequency response of the Ear at the Threshold of Hearing.

20Hz 100Hz 200Hz 1Khz 2kHz 5kHz 15kHz

17. What is this drawing (and the research behind it) called?

18. What frequency response anomaly do directional mics have - like Cardioid and Figure-of-Eight - that makes them different from Omnidirectional microphones?

- a.) Common Mode Rejection Ratio (CMRR)
- b.) Bernoulli Effect
- c.) Low-Pass filter
- d.) Proximity Effect

19. Describe the aforementioned anomaly...

20. What was the most challenging part of the Blitzkrieg mix?
