This worksheet contains questions related to the topics and skills taught and practiced in class, and must be completed in its entirety for a passing grade. This worksheet is worth 40 points – a score of 80% or better is required for a passing grade. Be attentive to detail and precise with your answers. Print neatly. Questions 3 and 10 are subjective and don’t have right or wrong answers. For these questions evidence of critical thought and reasoning are keys to a successful response.

This worksheet is due by the date specified on the course schedule. E-submissions are acceptable. Note: DocX files are problematic. Please send a more universal format (e.g. pdf).

1. Describe Z clipping and back clipping and why they are a problem. (4 points)
   z-clipping is: ...........................................................................................................................................
   It's problematic because ............................................................................................................................
   back-clipping is: .....................................................................................................................................
   It’s problematic because ..............................................................................................................................

2. Describe the ideal relationship between a leader and their rope to avoid being flipped upside-down in the event of a fall. (2 points)
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3. Why would you wear a helmet? Why not? (2 points)
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4. Explain the concept of rope drag and how to avoid it. (2 points)
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5. Describe 2 different techniques for anchoring your rope to two bolt anchors, when and why you would use them, and how you would clean them. (6 points)
   Technique #1 ..............................................................................................................................................
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   Technique #2 ..............................................................................................................................................
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6. Explain the typical anatomy of a bolt and what to look for when assessing the quality of fixed hardware. (2 points)
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7. Describe two ways to safely back up a rappel. (2 points)
   Method #1 ..................................................................................................................................................
   Method #2 ..................................................................................................................................................

8. Describe your strategy for managing the rope on a multi-pitch route (with and without a ledge at the belay) when swinging leads with your partner vs. when leading in blocks. (4 points)
   When swinging leads: ..................................................................................................................................
   When leading in blocks: ..................................................................................................................................

9. Walk through your process, beginning with your arrival at the anchor, for transitioning your team through an anchor on a multipitch climb. Explain the process both for block leads and as well as swinging leads. If you don’t describe it, I’ll assume you wouldn’t do it, so please include a high level of detail! (10 points)

10. What equipment should you bring on a 1-3 pitch climb with a simple descent? On a 3-6 pitch climb with a complex descent? (4 points)
    On a simple descent: ..................................................................................................................................
    On a complex descent: ..................................................................................................................................

11. When is acceptable to be anchored to only one bolt? (2 points)