First-year students at Med School were receiving their first anatomy class with a real dead human body. They all gathered around the surgery table with the body covered with a white sheet. The professor started the class by telling them "In medicine, it is necessary to have 2 important qualities as a doctor. The first is that you not be disgusted by anything involving the human body."

For example, the Professor pulled back the sheet, stuck his finger in the butt of the corpse, withdrew it and stuck his finger in his mouth. "Go ahead and do the same thing," he told his student. The students freaked out, hesitated for several minutes but eventually took turns sticking a finger in the butt of the dead body and sucking on it.

When everyone had finished, the Professor looked at them and told them, "The second most important quality is observation. I stuck in my middle finger and sucked on my index finger. Now learn to pay attention!"

WARM-UP QUESTIONS

1. True or False
   a. All Mountain Rescue Applicants are expected to be able to understand the following diagrams before filling out their applications
2. True or False
   a. A critical rescue thinker has an overall understanding of a system and is able to adapt and adjust to different rescue situations while maintaining an acceptable safety margin

3. True or False
   a. High angle rescues are rescues where angles are very steep to vertical

4. True or False
   a. Low angle terrain can range from 20 degrees to 60 degrees

5. True or False
   a. Low angle rescue differs from high angle rescues since more rescue personnel are at risk on the litter and there could be more tension on the ropes.

6. The angles where most low angle rescues occur are
   a. 45-60 degrees
   b. 15-45 degrees
   c. Less than 15 degrees
   d. Who cares, we need to be prepared for all angles

7. Which position is not necessary on a high angle rock rescue
   a. 3rd man
   e. Main line attendant
   f. Belay line attendant
   g. Safety officer
   h. Site commander/operations
   i. Litter attendant
   j. Edge pro
   k. Spotter
   l. Staging
   m. Incident Commander

8. True or False
   a. The proper term for force is Newton. 1,000 Newtons equals 1 Kilonewton. Rescue gear has ratings for strength. The ratings are measured in Kilonewtons (kN). Kilonewtons (kN) is the term we use to measure load and strength of rescue systems
9. Circle the correct answer
   a. 1 kN = 425 Lbs
   b. 1 kN = 225 Lbs
   c. 1 kN = (The last 2 digits of the year you were born) + (your age of the current year) = 111 Lbs

10. True or False
   a. When calculating safety factor we assume each persons load has a force equivalent to 1kN.

11. Circle the correct answer
   a. A Scarab is a sexually transmitted disease
   b. A Scarab is a species of beetle that was commonly used in many forms of ancient Egyptian art.
   c. A Scarab is a small, single device to control heavy rescue loads
   d. b & c are the correct answers

**ANCHORS**

1. Which anchor system is most often used for main and belay lines on a high angle rescue.
   a. Wrap 3 pull 2
   b. Tensionless Anchor
   c. Three-point load-distributing anchor
   d. Anchor straps

2. Circle the correct answer to this question. What is the advantage of a load-sharing anchor vs. a single-point anchor (see diagram)?
   a. A load sharing anchor will allow redundancy
   b. A load sharing anchor will distribute less force to each anchor
   c. All the above
   d. None of the above
3. A well-placed rock pro has a general rating of ______ kN when calculating safety factors.
   a. 2 kN
   b. 5 kN
   c. 10 kN
   d. Rock Pro should never be used as an anchor for rescues
4. True or False
   a. Rock Climbing Protection, such as cams and nuts can be used as anchors for a High angle lowering or uphaul. Cams and nuts are also acceptable as anchors for a 30-degree scree evacuation with a total of 4 people on a litter.
5. At what angle is the tension to each anchor equal?
   a. 45 degrees
   b. 90 degrees
   c. 120 degrees
   d. All the above
6. In order to distribute a load that is close to equal weight (less than 54%) for each anchor in a load-sharing anchor system, what is the maximum angle from our focus knot to the anchors
   a. 25 degree
   b. 40 degrees
   c. 54 degrees
   d. 90 degrees
7. Circle the correct answer
   a. When setting up a load sharing anchor system, we strive to keep our angles between 40-45 degrees in order to provide roughly 50% of the load (force) on each anchor.
   b. When setting up a load sharing anchor, a 90 degree angle will provide roughly 71% of the load (force) on each anchor.
   c. When setting up a load sharing anchor, a 120 degree angle will provide roughly 100% of the load (force) on each anchor.
   d. All the above
8. A weak anchor that is connected in line with the load with a tensioning unit connected to a stronger anchor is called
   a. Directional anchor
   b. Back-tie anchor
   c. Tensionless system
9. An anchor which allows a redirection of a load to a new fall line when an anchor is not in an ideal location is called
   a. Running belay
   b. Münter hitch
   c. Directional anchor

10. In a load-sharing anchor system, there is an anchor called the “American Death Triangle” below is a diagram. Why is this anchor called “American Death Triangle”.
   a. Because we figured it out before the French
   b. Because we figured it out before the British
   c. Because a triangle is not an octagon
   d. Because the load is putting increased stress on each anchor

11. How can we take a connected piece of webbing clipped onto 2 anchor points and avoid the “American Death Triangle
   a. There is no way to avoid this problem
   b. Take the center strand which connects the two anchors, give it a twist and bring down to the last strand of webbing and clip into the load
   c. Add another anchor point in line with existing anchors to make a bigger triangle
KNOTS

1. Connect knots on the left with the applications on the right. Fill in the boxes below to spell out what service we provide Pitkin County.

| 1. Knot used to connect 2 ends of webbing when building a wrap 3 pull 2 anchor | s. Figure 8 on a bite |
| 2. A knot used when assembling prusiks | e. Figure 8 follow through or trace 8 |
| 3. Knot used to connect main line to litter (low angle) | r. Water knot |
| 4. Knot used to isolate a damaged rope | u. Windsor knot |
| 5. Wide, symmetrical triangle knot | e. Fisherman’s knot |
| 6. Knot used with a tensionless anchor that does not have any impact on the ropes breaking strength | c. Butterfly knot |

2. True or False
   a. A hitch is a type of knot

3. True or False
   a. A Prusik, developed by Dr. Karl Prusik, is a hitch

4. True or False
   a. The following is important when attaching 2 prusiks on a rope and having them end up in the same direction. Start on one side of the rope and be consistent. Start over the rope or start under the rope when attaching the prusiks. Be consistent.

5. Where do we want the water knot when using a wrap-three, pull two anchor system
   a. Behind the anchor
   b. On the load side of the anchor
   c. Both are acceptable

6. True or false
   a. You can use either webbing or static line when setting up a wrap three pull two anchor

7. Which of the following is incorrect regarding a focus knot
   a. A focus knot strengthens the anchor
   b. A focus knot should be aligned with the direction of pull and self equalize 2 load sharing anchors
   c. A focus knot isolates anchors and provides redundancy
8. True or False
   a. A load releasing hitch is only used for a change over from lowering to uphaul on the main line

9. When attaching a load releasing hitch, the münter hitch is attached to the carabiner at the:
   a. Load side
   b. Anchor side

10. Describe the steps of tying a Radium Release Load Releasing Hitch. Connect the sequence on the left with the procedures on the right. Fill in the boxes below to describe a type of knot.

   1. Step 1 t. Clip tail end of the cord through the anchor carabiner, back down through the load carabiner. Bring back to anchor carabiner and tie a münter hitch with the running end at the farthest side and under the carabiner.
   2. Step 2 h. Gather 10 m of 8mm cord and 2 locking carabiners
   3. Step 3 i. Tie a figure 8 on a bight at the tail end and clip to a secure anchor for safety
   4. Step 4 c. Secure Radium Hitch using a bight to tie a half hitch around the entire stem below the münter hitch and then back it up with an overhand-on-a-bight knot
   5. Step 5

11. True or false
   a. The purpose of a load-releasing hitch is to release the tension on loaded prusiks.

12. Which of the following knots require a backup
   a. Regular bowline
   b. Long tail bowline
   c. Figure 8
   d. Water knot
ICS/ORGANIZATION/COMMUNICATIONS

1. Which question is the least important thing you need to know when arriving on a mission
   a. What’s going on
   b. Who do I work for
   c. What should I be doing
   d. Where should I be

2. What role does the spotter have during a high angle mission
   a. Make contact with the subject and transfer information
   b. Flag hazards up and down the cliff edge
   c. Make sure the hasty team has necessary equipment
   d. All the above

3. Circle all the possible positions in a Scree (low angle rescue)
   a. Main line attendant
   b. Belay line attendant
   c. Safety officer
   d. Site commander/operations
   e. Litter attendant
   f. Edge pro
   g. Staging
   h. IC
   i. Urologist

4. In a high angle scenario situation, who develops the plan on top for organizing the rescue
   a. Safety
   b. Planning Chief
   c. Site
   d. Incident Commander

5. On a high angle rescue, site should brief the team with the following information
   a. Here is what I think we are dealing with
   b. This is what I think we should do
   c. Here are some things we need to be careful of
   d. Questions and comments?
   e. All the above

6. Which of the following are key considerations when developing a plan for high angle rescue (scene size-up)
   a. Work from the edge backwards when accessing a high angle rescue
   b. Identify the position of the focal point for the main and belay line
   c. Identify anchors for the main and belay stations
   d. Determine if a change of direction is necessary
   e. All the above
7. Circle only the incorrect communication terminology used on the radio or verbally by key positions during a high angle mission.
   a. Wow man, that dude is F#@%
   b. Belay line ready
   c. Main line ready
   d. Litter Team ready
   e. Safety ready
   f. Litter is in control
   g. Slack Mainline
   h. Tension mainline
   i. Prepare for uphaul
   j. ROCK!!!
   k. Edge ready
   l. Prepare for lowering
   m. Down slow
   n. Advise when ready
   o. Standby
   p. Attendant approach the edge
   q. Haul team ready
   r. Hauling
   s. Attendant ready
   t. Stop
   u. Stop, all stop
   v. Mainline up
   w. Haul team haul
   x. Up rope
   y. Slack
   z. Safety, are we a go
   aa. Up slow
   bb. All stop
   cc. Clear channel for medical report
   dd. Off belay
   ee. Position the load
High Angle & Low Angle (scree) Study Guide (version b)  
Mountain Rescue Aspen  
2012

MAIN LINE/ BELAY LINES/UPHAUL

1. Circle the two key functions of the main line
   a. Back up the belay line
   b. Lowering
   c. Dividing the highline system in half for load efficiency
   d. uphauls

2. Which is true during normal operations  
   a. Belay line is a redundant back up and takes no load
   b. Belay line is a redundant back up and share equal load with main line
   c. Belay line is a redundant back up and distributes load 60/40 with main line

3. Which is true
   a. Belay line is always used on a low/steep angle rescue
   b. Belay line is an option on a low/steep angle rescue
   c. Belay line is not necessary on a low/steep angle rescue

4. Circle the key decision point for using a belay in a low/steep angle rescue
   a. Number of people on the litter
   b. Consequence of main line failure
   c. Republican or democrat in litter
   d. All the above

5. What are key considerations when setting up a change of direction
   a. Are we properly lined up with the edge
   b. Do we understand the load impact on the change of direction system
   c. Are we within a 10:1 safety factor
   d. All the above

6. When evaluating safety factor on a scree lowering, what are two load considerations we should be aware of when determining if our anchor(s) are sufficient?  
   a. Number of people and angle of terrain
   b. Anchor ratings and placement
   c. All the above

7. What is the purpose of a bear paw/rigging plate
   a. Distribute weight equally between the load and the anchor
   b. Organize rescue tools
   c. To keep black, brown and grizzly bears from entering restricted areas

8. What components should **not** be attached to a bear paw/rigging plate for the main line rigging
   a. Brake Rack
   b. A Canadian Skizee
   c. Load releasing hitch
   d. Double Pulley
   e. Extra Pulley
9. Which of the following is an incorrect statement when referencing a brake tube
   a. A brake tube is less likely to twist a rope than a break rack
   b. A brake tube is easier than a break rack for passing a knot

10. True or False
    a. When threading a break tube, the direction of wrap (clockwise vs. counter clockwise) will determine which side you are working on

11. Circle the incorrect statement
    a. When threading a brake tube start at the anchor side and thread 3 wraps with the final wrap around the vertical tube.
    b. When threading a brake tube start at the load side and thread 3 wraps with the first wrap around the vertical tube.
    c. When threading a brake rack you can start threading from the load side and work towards the anchor
    d. When threading a brake rack start from the load side, go under and through the loop and thread towards the anchor side.

12. True or False
    a. A Scarab is a small, simple device to control heavy rescue loads

13. Choose the correct answer
    a. A Hyperhorn is a trumpet on steroids
    b. A Hyperhorn is a friction component of Scarab rescue tool

14. True or False
    a. When adding friction to a Scarab, always start by wrapping a forward Hyperhorn

15. Which of the following is not a brake option for a rescue load
    a. Super munter
    b. 2 ATC’s in line
    c. Scarab
    d. Extra thick leather gloves

16. True or False
    a. One person can run a belay system. A second person feeding rope or taking up slack is helpful but not required

17. True or False
    a. One person can run a brake system. A second person feeding rope or taking up slack is helpful but not required
18. Circle the correct answer for a high angle lowering without a change of direction?
   a. No prusiks are needed for a high angle lowering
   b. 1 prusik is used for the main line
   c. 2 prusiks are used on the belay line
   d. 3 prusiks are used. 1 used on the belay line and 2 used on the main line

19. Circle the correct answer on the number of prusiks used during an up haul
   a. 1 prusik is used on the main line
   b. 2 prusiks. One for the main line and one for the belay line
   c. 3 prusiks. One for the main line and 2 for the belay line
   d. 5 prusiks. 3 for the main line and 2 for the belay line

20. The breaking strength of an 8 mm prusik on an 11 mm static line is
   a. 15kN
   b. 25kN
   c. Not important, because the prusik will slip before it breaks

21. Describe the steps necessary to pass a knot during a lowering. Connect sequence on the left with the procedures on the right. Fill in the boxes below to describe a hitch developed by an Austrian mountaineer.

   1. Step 1  u. Remove the brake system
   2. Step 2  p. Lower the load until the knot is just above the break
   3. Step 3  i. Slowly lower the load back onto the brake with load releasing hitch or other method(s).
   4. Step 4  k. Once the brake is holding the entire load, remove the pusiks and continue lowering.
   5. Step 5  r. Attach double prusiks on the main line, from the anchor (load releasing hitch), below brake to completely hold the system
   6. Step 6  s. Re-install the brake system with knot below the brake

22. True or False
   a. There are basically two methods when creating an uphaul system
      i. Using a separate rope and build the system in advance
      ii. Using the tail of the rope of the main line to create an uphaul system
23. A general rule for the number of people needed on an uphaul is to divide the mechanical advantage into a number between 20 & 30. Circle the best answer for the number of people needed on a 5:1 uphaul system
   a. 2
   b. 5
   c. 9
   d. Winches are preferred when a motorized vehicle is available

24. Describe the steps of converting from lowering to uphaul using the tail end of the main line. Connect steps on the left with the procedures on the right. Fill in the boxes below to describe a key rescue tool for mechanical advantage

   1. Step 1  l. Attach a prusik to the main line below the PMP
   2. Step 2  e. Set a haul team to pull hand over hand
   3. Step 3  y. Have attendant ready to call STOP for a reset of the prusik
   4. Step 4  u. Thread the main line above the prusik through a PMP
   5. Step 5  l. Attach a pulley on the tail line with a carabiner. Clip the carabiner onto the attached prusik
   6. Step 6  p. Remove brake rack using the same technique when passing a knot during a lowering

   1  2  3  4  5  6

Do not write in test book. Use answer sheet

GENERAL RIGGING

1. Connect the ropes described on the left with the corresponding ropes on the right. Fill in the boxes below to describe one of the most important rescue concepts.

   1. Main & Belay line
   2. Isolated/separate mechanical advantage rope for uphaul
   3. Safety Line
   4. Change of direction rope
   5. Rope for 3rd man
   6. Rope for edge pro

   a. 11 mm static 200 ft
   b. 11 mm static 200 ft
   c. 11 mm static Anchor rope
   d. 11 mm static rope 200 or 300 ft
   e. 11 mm static 200 ft or smaller anchor rope
   f. Dynamic climbing rope

   1  2  3  4  5  6

Do not write in test book. Use answer sheet
2. What is the terminology we use when describing force on our system
   a. Pound Force (lbf)
   b. Pound per square inch (psi)
   c. Kilogram Force (kgf)
   d. Kilopascal (kpa)
   e. Kilo Newton (kN)

3. Connect the rescue components on the left with the rating/breaking strength on the right. Fill in the boxes below to spell out an item attached to your harness:

   1. 1" tubular webbing  
   2. Locking carabiner (aluminum)  
   3. 11 mm main/belay line  
   4. 12.5 mm main line  
   5. PMP  
   6. 11 m main line with knot  
   7. BMS break rack  
   8. Wrap 3 Pull 2 using 1" tubular webbing  
   9. Tensionless anchor using 11mm static rope

   r. 30 kN
   a. 40 kN
   c. 18 kN
   i. 20 kN
   e. 35-40 kN
   a. 28 kN
   r. 30 kN
   b. 36 kN
   n. 46-56 kN (breaks rope @ 26 kN)

4. True or False
   a. A knot on a rope weakens the breaking strength. As a general rule, we deduct 1/3 from the ropes estimated rating

5. True or False
   a. One of the important considerations when reviewing safety factor(s) in high angle systems is the understanding of vectors.

6. 1kn = how many Lbs.
   a. Approximate weight of a single rescuer with gear
   b. Approximate weight of a single rescuer with gear and a sandwich
   c. Approximately 225 Lbs
   d. All the above

7. What is the sin of 30 degrees
   a. .25
   b. .375
   c. .5
   d. .65
   e. Who cares
8. Why is the sin of 30 degrees a number we should have memorized
   a. We should not memorize anything. It can damage brain cells
   b. Because the sin of 30 degrees has an impact on calculating safety factors
   c. Because the sin of 30 degrees equate to ½ of the actual load on a 30 degree slope angle.
   d. (b & c) are correct and (a) is ridiculous.

9. Ask Doug to borrow his I-phone and calculate the sin of a 45 degree angle
   a. .55
   b. .642787609686539
   c. .707106781186547
   d. .76604443118978

10. Study the chart below and list 2 important learning points
    a. Angles and number of people on a litter are used to calculate safety factor
    b. Angles and number of people on a litter are used to calculate safety factor
    c. All the above

Litter Team Forces

<table>
<thead>
<tr>
<th>Angle (degrees)</th>
<th>sin(30°)</th>
<th>200 kg (2 people)</th>
<th>280 kg (3 people)</th>
<th>360 kg (4 people)</th>
<th>440 kg (5 people)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.03</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>5</td>
<td>0.08</td>
<td>0.17</td>
<td>0.24</td>
<td>0.31</td>
<td>0.38</td>
</tr>
<tr>
<td>10</td>
<td>0.17</td>
<td>0.34</td>
<td>0.48</td>
<td>0.61</td>
<td>0.75</td>
</tr>
<tr>
<td>15</td>
<td>0.26</td>
<td>0.51</td>
<td>0.71</td>
<td>0.91</td>
<td>1.12</td>
</tr>
<tr>
<td>20</td>
<td>0.34</td>
<td>0.67</td>
<td>0.94</td>
<td>1.21</td>
<td>1.47</td>
</tr>
<tr>
<td>25</td>
<td>0.42</td>
<td>0.83</td>
<td>1.16</td>
<td>1.49</td>
<td>1.82</td>
</tr>
<tr>
<td>30</td>
<td>0.50</td>
<td>0.98</td>
<td>1.37</td>
<td>1.75</td>
<td>2.16</td>
</tr>
<tr>
<td>35</td>
<td>0.57</td>
<td>1.12</td>
<td>1.57</td>
<td>2.07</td>
<td>2.47</td>
</tr>
<tr>
<td>40</td>
<td>0.64</td>
<td>1.26</td>
<td>1.76</td>
<td>2.27</td>
<td>2.77</td>
</tr>
<tr>
<td>45</td>
<td>0.71</td>
<td>1.39</td>
<td>1.94</td>
<td>2.49</td>
<td>3.05</td>
</tr>
<tr>
<td>50</td>
<td>0.77</td>
<td>1.55</td>
<td>2.10</td>
<td>2.70</td>
<td>3.28</td>
</tr>
<tr>
<td>60</td>
<td>0.87</td>
<td>1.70</td>
<td>2.30</td>
<td>3.00</td>
<td>3.75</td>
</tr>
</tbody>
</table>

\[ T = 5 \text{ kN} \times \sin(30°) \]
\[ T = 2.5 \text{ kN} \]
11. Which statement is true
   a. The more you increase the angle of a rope on a pulley, the less force you place on the pulley
   b. The greater the ropes angle from a focal point to two anchors, the greater the force on the anchors.

12. True or false
   a. Belays are an area that has more data and testing then any other rigging system

13. True or False
   a. Figure 8 knots must be backed up

14. When do we need mechanical advantage in a high angle system
   a. Uphauls
   b. Raise a subject to lower tension on subjects rope system
   c. Litter adjustments
   d. All the above

15. What is the most common mechanical advantage method used in a high angle system for uphauls
   a. 4:1 simple
   b. 4:1 compound
   c. 2:1 simple
   d. 3:1 simple

16. True or False
   a. A separate rope system or the tail of the main line can be used to set up a 3:1 mechanical advantage system

17. True or False
   a. Pulley systems providing mechanical advantage can be divided into 3 categories: simple, compound and complex. For Mountain Rescue Aspen, we mostly work with simple mechanical advantage

18. Which of the following statements are correct. You can pick more than one.
   a. If the tied end of the rope is at the anchor, the mechanical advantage will be an even number
   b. If the tied end of the rope is at the anchor, the mechanical advantage will be an odd number
   c. If the tied end of the rope is at the load, the mechanical advantage will be an odd number
   d. If the tied end of the rope is at the load, the mechanical advantage will be an even number

19. True or False
   a. In a simple mechanical advantage system, all pulleys at the load side, travel towards the anchor at the same speed
20. Which statement is correct when evaluating a simple mechanical advantage system
   a. The pulley(s) located closest to the load provides a change of direction and does not provide mechanical advantage
   b. The pulley located at the anchor provides change of direction and does not add mechanical advantage

21. Which statement is correct when evaluating a simple mechanical advantage system
   a. Mechanical Advantage of a simple system is determined by counting all the number of ropes in a vertical line
   b. Mechanical Advantage of a simple system is determined by counting the number of ropes under tension at the load side of the pulley(s)

22. Which statement is correct when describing a compound mechanical advantage system
   a. A compound mechanical system is one simple pulley system pulling on another simple pulley system
   b. The traveling pulleys travel towards the anchor at different speeds
   c. A compound mechanical system provides greater mechanical advantage than simple systems for the same number of pulleys
   d. All the above

23. True or False
   a. When calculating mechanical advantage of a compound M.A. system, we use the following formula:
      i. (Closest simple M.A./Furthest simple M.A.) x (Number of pulleys)

24. Circle the statement which is a 15 to 1 safety factor:
   a. 2 Kn load on a rope pulling on a carabiner rated to 30 Kn
   b. 2 Kn load on a 11 mm anchor rope pulling on a focus knot connected to a multi-point sharing anchor with a 120 degree angle
   c. 2 Kn load on a rope with a 180 degree change of direction, pulling on a carabiner rated to 22Kn.
25. Circle the correct answer
   a. When positioning a carabiner, the gate is facing on the ground and uphill
   b. When positioning a carabiner, the gate is facing off the ground and uphill
   c. When positioning a carabiner, the gate is facing off the ground and downhill

LITTER ATTENDANT & LITTER RIGGING

1. True or False
   a. There are 5 components on a pre-rigged setup that hangs from a bear paw on a litter spider.
      1. Side litter attachments, head of litter
      2. Side litter attachments, foot of the litter with raising and lowering capability
      3. Attendant Etrier & daisy
      4. Attendant tie in
      5. Patient Daisy chain for patient tie in

2. A rigging plate (bear paw) which is attached to the Bridle (Litter Spider) connects the litter to the
   a. Main line
   b. Belay line
   c. a & b
   d. Phone a friend

3. True or False
   a. When tied into a litter on a low angle lowering, attendants should lean back. Attendants cannot lean back enough.

4. Which is the preferred litter on a high angle rescue
   a. Ferno litter (orange litter)
   b. Junkin litter (yellow litter)
   c. Titanium litter
   d. Crystal Sled
PATIENT PACKAGING
12. True or False
   a. Patients should always have 2 points of attachment

THIRD MAN
1. True or False
   a. Third man is responsible for assessing a situation, securing a patient and preparing the patient for either an uphaul or lowering.
2. Circle the most common mistakes made by the 3rd man during a patient pick-off
   a. Forgets to attach rope to descending device and need to pull parachute
   b. Gets distracted on medical condition of patient and forgets to secure the patient
3. True or False
   a. When securing the patient, only one point of attachment is necessary
4. True or False
   a. A high angle rescue situation can have more than one 3rd man over the edge
5. Circle the key rescue tools required for a 3rd man to have attached to his/her harness.
   a. Edge pro
   b. Descending device
   c. Ascending device
   d. Pick off strap
   e. Pulley
   f. A rope bag
   g. A patient harness (Yates)
   h. Chest harness for patient

SITE (COMMAND)
1. True or False
   a. A proper sequence for communication on a technical rope rescue is:
      i. Quiet on the set
      ii. Role Call
      iii. Position the load
      iv. Pre-tension the main
      v. Attendant lean back
      vi. Main down or Litter attendant, you have the communication.
EDGE PRO
1. Edge pro protects which ropes(s)
   a. Main line
   b. Belay Line
   c. 3rd man rope
   d. All the above
2. True or False
   a. Edge pros first priority is to help and safety the 3rd man going over the edge
3. True or False
   a. The following are edge protection tools used for protecting ropes during a high angle rescue
      i. Edge roller
      ii. Rope sleeve
      iii. Canvas sheet
      iv. Plastic sliding surface – Ice cube tray
4. True or False
   a. Edge pro is always prepared to go over the edge to assist
5. True or False
   a. Edge pro will have their own rope and they are ready to hang or rappel over the side
6. True or False
   a. Edge pro is not part of the hasty team
7. True or False
   a. Edge will provide the greatest value by lifting the litter during edge transition, not by lifting the main line.