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## Trunk – Torso

Name: \_\_\_\_\_

\*\* When answering questions regarding the lumbar spine and/or cervical spine be sure to include right, left or bilateral contractions of musculature where appropriate. Do NOT use 'ipsilateral' or 'contralateral'; these are descriptors only and must be used to determine if the RIGHT or LEFT of a muscle side is acting.

When asked **HOW** a muscle is acting, please answer using ONE of the following responses: concentric, eccentric, or isometric.

When asked how to strengthen a muscle, please use short numbered statements that address the following:

1. Patient/client starting position (standing, sitting, quadruped, side lying etc)
2. Type of resistance being used (manual, elastic band, dumbbell etc)
3. Location of resistance
4. Joint action that is being resisted or controlled

1. Using picture S1:

- A. Which muscle is being stretched at the lumbar spine?

\_\_\_\_\_

- B. Which muscles of the hip and knee are being stretched?

Hip: \_\_\_\_\_

Knee: \_\_\_\_\_

2. Using picture set #8 as a continuous motion and assuming she is generating power A through C and from frame C to D she is following through:

- A. From B through D what action is taking place at the trunk/lumbar spine?

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B. From B to C which muscles of the lumbar spine are working?

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C. HOW are the muscles acting from B to C?

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3. Using picture set #16 as a continuous motion:

A. What muscles are working at the lumbar spine from A to B?

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B. From B through D, what actions are taking place at the lumbar spine, hip, and knee?

Lumbar Spine: \_\_\_\_\_

Knee: \_\_\_\_\_

Hip: \_\_\_\_\_

C. From B to D, what lumbar spine muscles are acting?

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D. What muscles of the lumbar spine are being stretched in frame B?

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E. HOW are the lumbar spine muscles acting from B to D?

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## 4. Using frame S3:

- A. How are the abdominal muscles working? (1)

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5. Using frame S2: **\*\* assume he has moved in the frontal plane ONLY AND THAT HE BEGAN IN ANATOMICAL POSITION:**

- A. What position is the lumbar spine in?

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- B. What lumbar spine muscles acted in order for him to assume this position? \*\* please use your critical thinking skills!

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- C. HOW did the lumbar spine musculature work in order for him to assume this position?

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## 6. In a STANDING POSITION, if the iliopsoas was pathologically shortened please describe what the result to the lumbar spine and pelvis might be. \*\* Please consider what the muscle would pull on and what would the result be!

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## 7. Using Picture Set #21:

- A. From B to C, what action occurred at the lumbar spine?

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- B. From D to E, HOW are the lumbar spine muscles acting?

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C. From D to E, what muscles are acting at the lumbar spine?

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8. Please describe an exercise that would strengthen the RIGHT quadratus lumborum. Your answer should be clear and concise in short numbered statements. Please include which plane your exercise takes place in, your starting position, what type of resistance is being used and what action is being resisted.

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9. Using picture set #8:

In frame A as STOP motion what muscles of the cervical spine are responsible for placing her in that position? \*\* Assuming she started in anatomical position.

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10. Using picture set #21:

A. From E through H, what action occurred at the lumbar spine?

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B. From E through G, what muscles of the lumbar spine are acting?

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C. From B to C, what action occurred at the cervical spine?

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11. Using S4: **\*\* assume he has moved in the frontal plane ONLY AND THAT HE BEGAN IN ANATOMICAL POSITION:**

A. What position is the lumbar spine in?

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B. What muscles of the lumbar spine are being stretched?

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