

**BASIC RIGGING / SIGNALPERSON TEST**

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

1. Which person should make the final decision about the lifting operation?

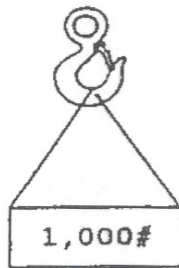
- A. The Superintendent
- B. The Flagman
- C. The Crane Operator
- D. The Supervisor

2. Does sling angle affect the liftin capacity of rigging equipment?

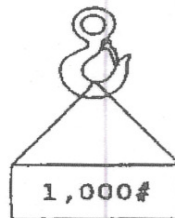
- A. Yes
- B. No

3. Which set of wire rope slings have the most tension exerted upon them?

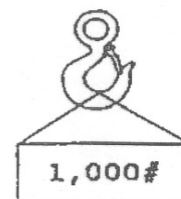
A.



B.



C.



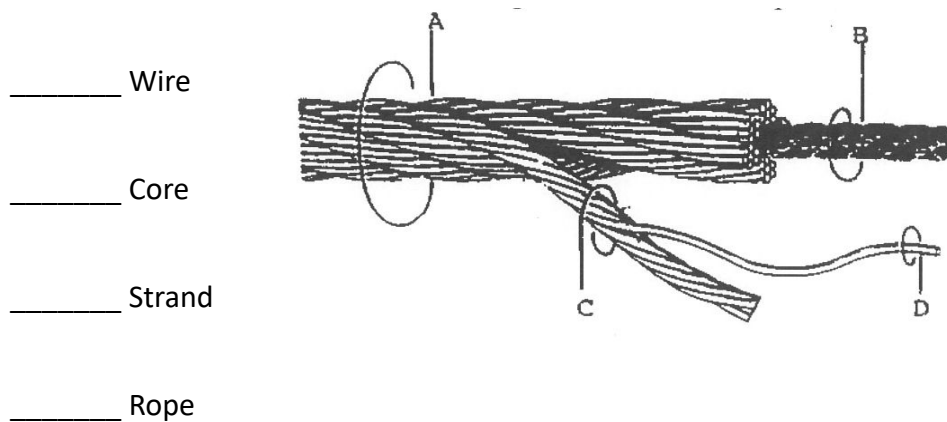
4. Wire rope slings must be replaced if there are \_\_\_\_\_ or more broken wires within one strand in rope lay.

- A. 3
- B. 5
- C. 10



5. Which of the following is true regarding tag lines?
- A. Tag lines are required when the weight of the load exceeds the capacity of the crane.
  - B. Tag lines are required only when the weight of the load exceeds 2,000 pounds.
  - C. Tag lines are required, on all loads.
  - D. Tag lines are not required, only recommended.

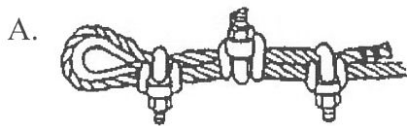
6. The minimum clearance of a crane boom to overhead power lines of up to 50 KV is?
- A. 10 feet
  - B. 2 feet
  - C. 45 feet
7. One rope lay is equal to"
- A. Exactly one foot of wire rope.
  - B. The length of rope divided by 10 times the diameter of the rope.
  - C. The length of rope requires for a single strand to make one complete spiral.
8. Which of the following is true regarding synthetic web slings?
- A. The rated capacity must be clearly legible on the sling.
  - B. They cannot be used in excess of 180" Fahrenheit.
  - C. They cannot be used in excess of their rate capacity.
  - D. All of the above are true.
9. Match the components of the wire rope to the letter on the picture below:



10. Two ½" chokers connected together (end to end) can lift as much as a 1" choker?

- A. TRUE
- B. FALSE

11. Which of the following is the proper method of installing wire rope clamps?



C.

12. Hoist or load attachment chains, wire rope slings, and any other rigging used shall be inspected:



- A. Each Monday
- B. Monthly
- C. Weekly
- D. Prior to each use

13. Any bolt can be used for a shackle pin if the thread patterns match?

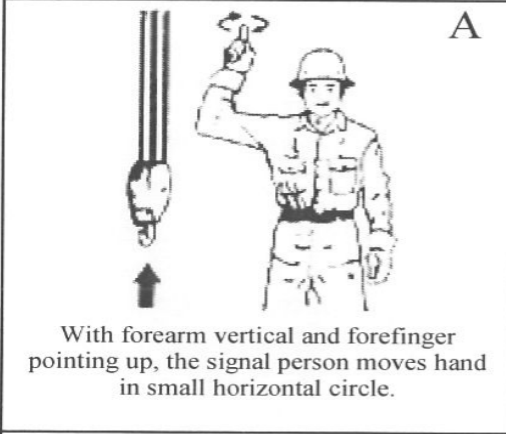
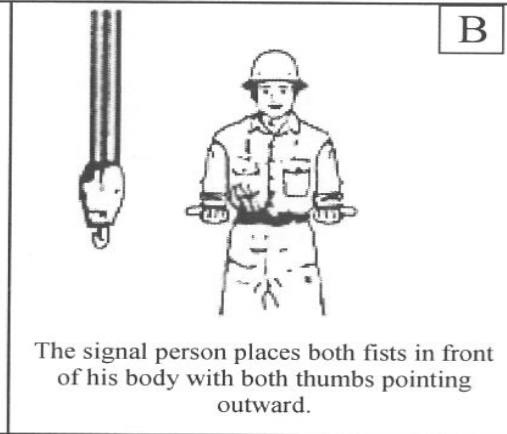
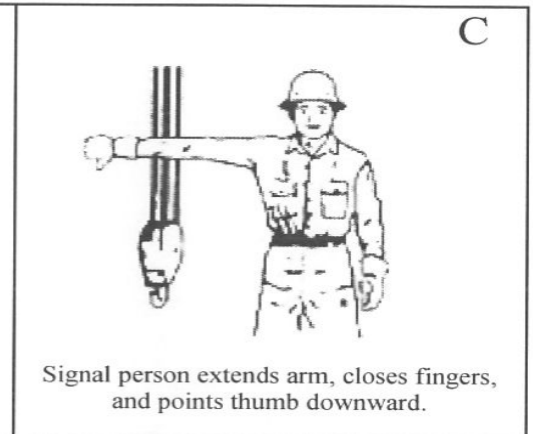
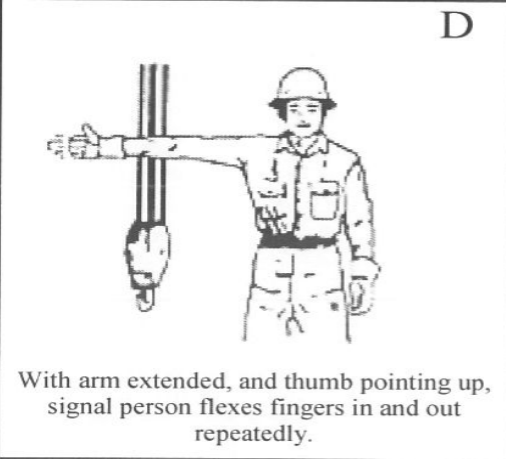
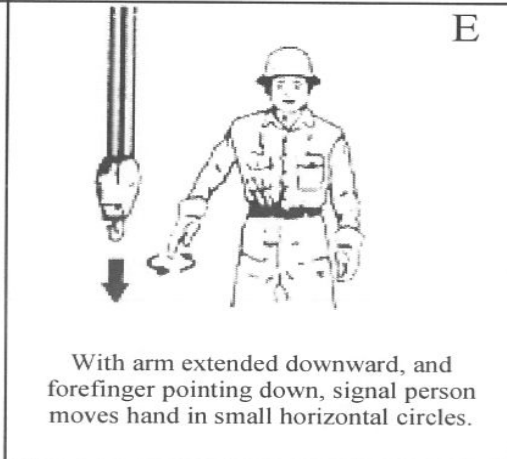
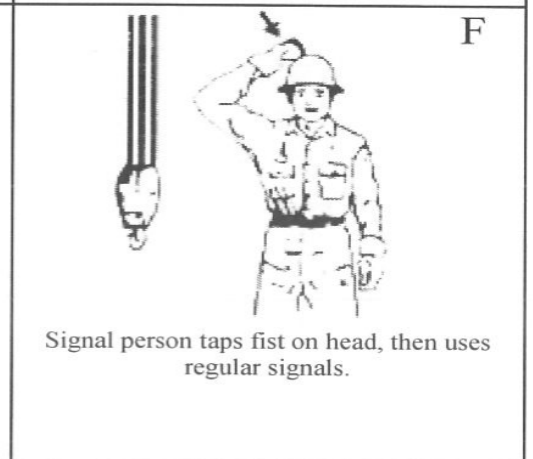
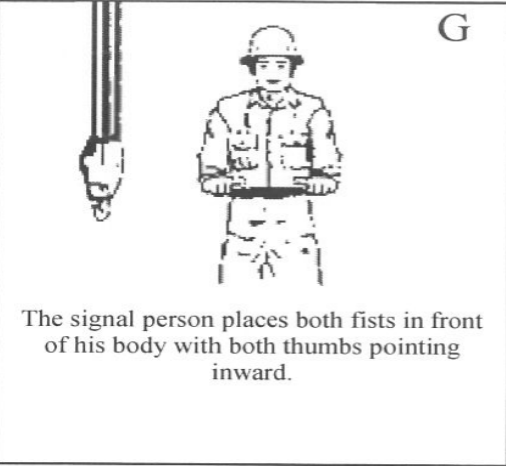
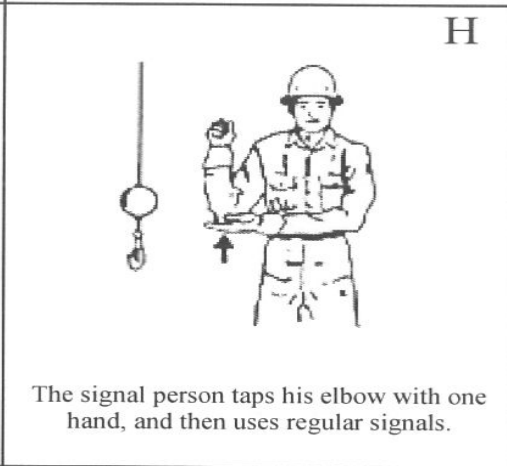
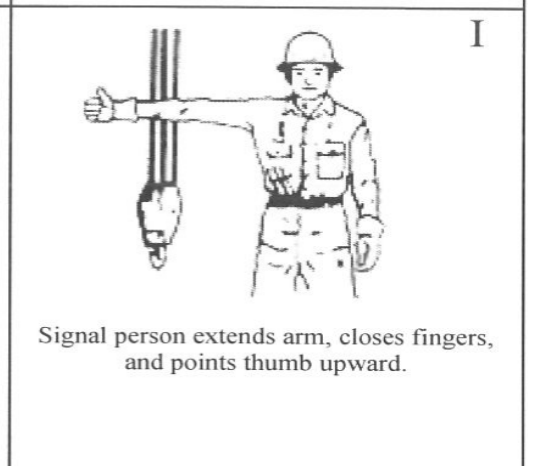
- A. TRUE
- B. FALSE

14. Which of the following sling configurations is the strongest?

- A. Vertical
- B. Choke
- C. Basket
- D. They are all the same



15. When making a choke with a shackle, the pin should always be placed in the eye of the short side of the choker to prevent the pin from unscrewing when the choker is tightened?
- A. TRUE
  - B. FALSE
16. A softener should be used to prevent sling damage only on nylon slings.
- A. TRUE
  - B. FALSE
17. To counteract boom deflection, what should the crane operator do?
- A. Hoist Down
  - B. Telescope In
  - C. Swing
  - D. Boom Up
18. When using radios to communicate, after the signal person gets the specific operator's attention, what should the signalperson state?
- A. Direction
  - B. Location
  - C. Load
  - D. Function and Direction
19. When should the "telescope out" signal be given?
- A. Before lifting a load
  - B. When a load needs to be shifted away from the operator
  - C. When a load needs to be lifted higher

<p style="text-align: right;">A</p>  <p>With forearm vertical and forefinger pointing up, the signal person moves hand in small horizontal circle.</p>	<p style="text-align: right;">B</p>  <p>The signal person places both fists in front of his body with both thumbs pointing outward.</p>	<p style="text-align: right;">C</p>  <p>Signal person extends arm, closes fingers, and points thumb downward.</p>
<p style="text-align: right;">D</p>  <p>With arm extended, and thumb pointing up, signal person flexes fingers in and out repeatedly.</p>	<p style="text-align: right;">E</p>  <p>With arm extended downward, and forefinger pointing down, signal person moves hand in small horizontal circles.</p>	<p style="text-align: right;">F</p>  <p>Signal person taps fist on head, then uses regular signals.</p>
<p style="text-align: right;">G</p>  <p>The signal person places both fists in front of his body with both thumbs pointing inward.</p>	<p style="text-align: right;">H</p>  <p>The signal person taps his elbow with one hand, and then uses regular signals.</p>	<p style="text-align: right;">I</p>  <p>Signal person extends arm, closes fingers, and points thumb upward.</p>

D. Only after the job is complete

20. On a crane with more than one winch, which hoist should be used to lift a small load?

- A. Main Hoist
- B. Auxiliary Hoist

21. Who has the authority to give an “emergency stop” signal?



- A. The operator
- B. Anyone
- C. The foreman
- D. The signalperson

22. What is used to prevent damage to chokers?

- A. Guards
- B. Protector Plates
- C. Ridge Caps
- D. Softeners

**Match the signals above to the correct signal interpretation listed below:**

23. \_\_\_\_\_ Hoist Up

28. \_\_\_\_\_ Retract Boom

24. \_\_\_\_\_ Boom up and hold the load

29. \_\_\_\_\_ Use main hoist

25. \_\_\_\_\_ Hoist down

30. \_\_\_\_\_ Extend Boom

26. \_\_\_\_\_ Boom down

31. \_\_\_\_\_ Boom up

27. \_\_\_\_\_ Use auxiliary hoist

**PERFORMANCE EVALUATION OF RIGGERS / SIGNALPERSONS**

Employee: \_\_\_\_\_

Date: \_\_\_\_\_

**RIGGING PROCEDURES (2 points)**

**Test 1**

- Internal damage
- Capacity in a choke (2,100 lbs)
- Do not use

**Test 2**

- Good

**Test 3**

**Test 6**

- No tag
- Heat damage
- Do not use

**Test 7**

- No Cotter pin
- Do not use



- No Tag
- Cut
- Heat damage

**Test 4**

- Heat damage
- Cut in eye
- Capacity in a basket (12,400 lbs)

**Test 5**

- Kink
- Capacity in a vertical hitch (1.4 tons)
- Broken wires near tag
- Do not use

**Test 8**

- Damage pin
- Capacity (2 tons)
- Do not use

**Test 9**

- Good

**Test 10**

- Damaged Safety Latch
- Do not use

**RIGGING EXAMPLE (2 points)**

- Used shackles
- Proper use of shackles (pin in eye of sling)
- Proper use of shackles (pin tightened all the way)
- Proper use of shackles (pin up on hook)
- Direction of bite on both coke points
- Capacity if using spreader bar (4,960 lbs)

**RIGGING KNOWLEDGE (2 points)**

- Understand proper tagline use
- Understand the effects of center of gravity
- Understands the concept of boom deflection
- Understand the effect of sling angle
- Understands what to do with damaged slings

**HAND SIGNALS (2 points)**

- Boom down
- Hoist up
- Boom up and hoist down
- Swing left
- Boom up
- Hoist down
- Boom down and hoist up
- Telescope out
- Use main hoist
- Use Auxiliary hoist
- Use stop signal correctly
- Displayed proper radio communication techniques

Notes: \_\_\_\_\_

Total Rating \_\_\_\_\_ Evaluator: \_\_\_\_\_

Note: Evaluation is good for two years or unless found for unsafe operation, work condition changes that effects the safe practices, incurs a near-miss, or has an accident.