

Chapter 8 Test

Name: _____ Date: _____

Directions: Write the correct letter on the blank before each question.

- _____ 1. The lowest, widest section of an extension ladder that always maintains contact with the ground while the ladder is being raised is the: (315) [4.3.6]
- A. bed section.
 - B. truss section.
 - C. guide section.
 - D. stationary section.
- _____ 2. Which part of a ladder is placed on the ground when the ladder is positioned? (315) [4.3.6]
- A. Fly
 - B. Butt
 - C. Rung
 - D. Beam
- _____ 3. The moveable upper part of an extension ladder that is raised to various heights is called the: (315) [4.3.6]
- A. halyard.
 - B. fly section.
 - C. truss block.
 - D. bed section.
- _____ 4. Swivel plates attached to the butt of the ladder are called: (315) [4.3.6]
- A. guides.
 - B. footpads.
 - C. butt spurs.
 - D. protection plates.

- _____ 5. The _____ is the rope or cable used to raise the upper sections of an extension ladder. (316) [4.3.6]
- A. pawl
 - B. pulley
 - C. halyard
 - D. guide line
- _____ 6. What are the pawls (dogs) of a ladder designed to do? (316) [4.3.6]
- A. Hold the halyard in place after it has been extended
 - B. Secure the ladder over the ridge of the building's roof
 - C. Hold the fly section in place after it has been extended
 - D. Secure the ladder to the surface beneath it and prevent slippage
- _____ 7. For which task would a single ladder be used? (318) [4.3.6]
- A. To reach someone trapped in a 6-foot (2 m) trench
 - B. To provide stability while working on a pitched roof
 - C. To gain access to the roof of a commercial building
 - D. To gain access to the third story of a residential home
- _____ 8. What feature does a roof ladder have that a single ladder does not have? (318) [4.3.6]
- A. The ability to be raised to multiple heights
 - B. A halyard that is used to secure the ladder in place
 - C. Butt spurs that prevent it from slipping when deployed
 - D. Hooks used to secure it over the top of the roof's ridge line
- _____ 9. For which of the following would a roof ladder be a better choice to use than a single or extension ladder? (318) [4.3.6, 4.3.12]
- A. Climbing over security gates or fences
 - B. Reaching the roof of a commercial building
 - C. Providing access to a second or third story window
 - D. Providing a stable surface on which a firefighter can stand when ventilating a roof

- _____ 10. Which feature does an extension ladder have that a single or roof ladder does not have? (318) [4.3.6]
- A. Tie rods that support the rungs
 - B. Truss blocks that support the rails or rungs
 - C. Hooks at the tip of the ladder to help secure it in place
 - D. A fly section that can be raised to various working heights
- _____ 11. What does an extension ladder's size classification indicate? (318) [4.3.12]
- A. The full length to which it can be extended
 - B. The ladder's length when the fly section is not extended
 - C. The minimum reach when placed at the appropriate climbing angle
 - D. The maximum building height against which the ladder can be raised
- _____ 12. What is a sign of heat exposure on a ladder? (320) [4.5.1]
- A. Rust
 - B. Blistered paint
 - C. Loose bolts or rivets
 - D. Expired heat sensor label
- _____ 13. What marking or label does NFPA 1931 require to be on all ladders? (320) [4.5.1]
- A. Reflective white tip
 - B. Balance point stripe
 - C. Manufacturer's name plate
 - D. Recommended end of service date
- _____ 14. Why do some ladders have a white tip or reflective tape attached to the tip? (321) [4.5.1]
- A. To indicate the balance point of the ladder
 - B. To indicate the maximum reach of the ladder
 - C. To increase visibility in smoky or dark conditions
 - D. To measure the amount of heat the ladder has been exposed to

- _____ 15. Which type of ladder is likely to be affected by water damage? (322) [4.5.1]
- A. Steel ladder
 - B. Wooden ladder
 - C. Fiberglass ladder
 - D. Aluminum ladder
- _____ 16. When inspecting a roof ladder, it is important to check that the: (322) [4.5.1]
- A. fly sections glide easily up and down.
 - B. halyard does not show signs of dry rot.
 - C. pulleys turn freely and do not stick in place.
 - D. hook assemblies are not loose, deformed, or rusted.
- _____ 17. When an extension ladder is in the bedded position, the halyard cable should be: (322) [4.3.6]
- A. pulled taut.
 - B. left hanging freely.
 - C. tied to the tie rods.
 - D. supported by the pawls.
- _____ 18. Ground ladders should be service tested at least once a year and: (323) [4.5.1]
- A. after being subjected to high heat or rough treatment.
 - B. a minor service test should be done on them each day.
 - C. a minor service test should be done on them each week.
 - D. when they are subjected to extremely cold temperatures.
- _____ 19. When cleaning a ladder, firefighters should: (323) [4.5.1]
- A. work in teams of two or more.
 - B. use a stiff bristled brush and hot water.
 - C. look for damage or wear and report any defects.
 - D. use strong chemical solvents to clean dirt and debris.

- _____ 20. A Fire Fighter I should be able to perform general ladder maintenance, including: (324) [4.5.1]
- A. repairing a fly section that will not properly extend or retract.
 - B. tightening the hooks of a roof ladder if they have come loose.
 - C. storing ladders so that they are free from moisture and vehicle exhaust.
 - D. replacing any rungs or components that have begun to show signs of wear.
- _____ 21. What is a general safety guideline for ladder use? (324) [4.3.6, 4.3.11, 4.3.12]
- A. Never leave any type of ladder unattended.
 - B. Use back and arm muscles instead of leg muscles to lift ladders.
 - C. Ladders should be raised at least 10 feet (3 m) away from electrical wires.
 - D. No more than two firefighters should work on each 10-foot (3 m) section of ladder.
- _____ 22. To prevent injury when raising or lowering an extension ladder: (324) [4.3.6, 4.3.12]
- A. grasp the beams, rather than the rungs.
 - B. do not shift the ladder once it is in place.
 - C. keep the halyard tied throughout the operation.
 - D. ensure that the pawls are seated just below the rungs.
- _____ 23. In order to safely lift a ground ladder, it is important: (325) [4.3.12]
- A. to have two firefighters per section of ladder.
 - B. for each firefighter on the team to lift one at a time.
 - C. for all firefighters to be on the same side of the ladder.
 - D. to lift on command of a firefighter who can see the entire team.
- _____ 24. What safety precaution must be taken when raising a ladder near overhead electrical wires? (325) [4.3.6, 4.3.11, 4.3.12]
- A. Extend the fly section before raising.
 - B. Raise the ladder perpendicular to the building.
 - C. Look up multiple times to check for the location of the wires.
 - D. Wait for a representative from the electric company to arrive before raising the ladder.

- _____ 25. Modern metal and fiberglass ladders are designed to be used with the: (326) [4.3.6]
- A. fly facing in.
 - B. fly facing out.
 - C. halyard left untied.
 - D. halyard tied to the top rung.
- _____ 26. Once an extension ladder is raised and in place, the halyard should be: (326) [4.3.6, 4.3.11, 4.3.12]
- A. tied to the lowest rung of the extension ladder.
 - B. secured to prevent someone from becoming tangled in it.
 - C. left untied so that the extension height can easily be changed.
 - D. wrapped around a rung and then tied around the ladder's beam.
- _____ 27. When personnel are working on the roof or upper stories,: (327) [4.3.6, 4.3.11, 4.3.12]
- A. there must be at least two means of escape in different locations.
 - B. two ladders should be placed directly next to one another as a means of escape.
 - C. aerial devices should be chosen for escape instead of ground ladders, if possible.
 - D. ladders should be positioned on the north and south sides of the building, if possible.
- _____ 28. When determining the correct ladder to use, the height of a residential story can be estimated as: (327) [4.3.6, 4.3.12]
- A. 10 feet (3 m).
 - B. 15 feet (4.5 m).
 - C. 20 feet (6 m).
 - D. 25 feet (7.5 m).
- _____ 29. The designated length of a ladder is: (328) [4.3.6, 4.3.12]
- A. the same as the ladder's working length.
 - B. always less than a ladder's working length.
 - C. the height a ladder will reach after being set to the appropriate climbing angle.
 - D. the total length of a single section ladder and the maximum extended length of an extension ladder.

- _____ 30. For which of the ladder mounting locations would firefighters access the ladder from the rear of the apparatus? (329) [4.3.6]
- A. Mounted vertically on the left or right side of the apparatus
 - B. Hanging on a beam in racks on the right side of the apparatus
 - C. Laying flat in a compartment under the right side of the hose bed
 - D. In a mechanically operated rack that lowers from the top of the hose bed to the right side of the apparatus
- _____ 31. What piece of information should firefighters know in order to help ladder operations be as quick and efficient as possible? (329) [4.3.6]
- A. Previous calls on which each ladder was used
 - B. Types of ladders that are marked out of service
 - C. Types and locations of ladders carried on the apparatus
 - D. Manufacturer and manufacture date of each ladder carried on the apparatus
- _____ 32. When removing a ladder that is mounted on the side of an apparatus, (330) [4.3.6]
- A. pull the ladder down to release it from the bracket.
 - B. unlatch the securing devices and lift the ladder off the bracket.
 - C. open the access panel, release the mounting bracket, and slide the ladder out.
 - D. use a tool to loosen the mounting bracket and lift the ladder away from the apparatus.
- _____ 33. When planning to transition directly from a carry to a raise, a ladder should be carried: (331) [4.3.6, 4.3.12]
- A. tip first.
 - B. butt first.
 - C. by at least three firefighters.
 - D. upright and parallel to the building.
- _____ 34. When placing ground ladders, what conditions must be communicated to crew members and/or supervisors? (332) [4.3.6, 4.3.11, 4.3.12]
- A. Time of day
 - B. Age of the structure
 - C. Icy ground or uneven terrain
 - D. Temperature and humidity levels

- _____ 35. What would be the proper placement for a ground ladder that will be used to perform ventilation on a second story window? (333) [4.3.6, 4.3.11]
- A. The tip of the ladder is raised to just below the window sill.
 - B. The ladder is raised a minimum of three rungs above the roof's edge.
 - C. The tip of the ladder is raised to the mid-point of the window on the downwind side.
 - D. The tip of the ladder is even with the top of the window on the upwind side of the window.
- _____ 36. Where would generally be the safest placement for a ground ladder that is going to be used for rescue? (333) [4.3.6, 4.3.9]
- A. The tip of the ladder is raised to just below the window sill.
 - B. The ladder is raised a minimum of three rungs above the roof's edge.
 - C. The tip of the ladder is raised to the mid-point of the window on the downwind side.
 - D. The tip of the ladder is even with the top of the window on the upwind side of the window.
- _____ 37. Avoid placing ladders: (333) [4.3.6, 4.3.11, 4.3.12]
- A. at an angle of greater than 60 degrees.
 - B. on the upwind side of a door or window opening.
 - C. at multiple locations on different sides of the building.
 - D. over openings where they may be exposed to heat or flame.
- _____ 38. Ladders are most stable and offer the easiest climbing position when placed at a: (333) [4.3.6, 4.3.11, 4.3.12]
- A. 35-degree angle from the building.
 - B. 55-degree angle from the building.
 - C. distance to the building equal to two-thirds the ladder's working length.
 - D. distance from the building equal to one-fourth the ladder's working length.

- _____ 39. What is a safety precaution that should be taken when heeling a ladder? (335) [4.3.6, 4.3.11, 4.3.12]
- A. Grasp the ladder rungs rather than the beams.
 - B. Use a ladder belt to secure the ladder to a fixed object.
 - C. Look forward, not up, when someone is climbing the ladder.
 - D. Wear full PPE, including SCBA, when heeling from behind the ladder.
- _____ 40. Tying in a ground ladder involves: (335) [4.3.6, 4.3.12]
- A. using a ladder belt to secure the ladder to a stationary object.
 - B. standing beneath the ladder and pulling the ladder toward the building.
 - C. standing at the bottom of the front ladder and pushing the ladder toward the building.
 - D. using a rope hose tool or safety strap to secure the ladder to a stationary object.
- _____ 41. When one firefighter raises an extension ladder from a low-shoulder carry: (336) [4.3.6, 4.3.12]
- A. the ladder must be raised with the fly in, then pivoted so that the fly is facing out.
 - B. the ladder must be raised parallel to the building instead of perpendicular to it.
 - C. the building is used to heel the ladder and prevent it from slipping while being raised.
 - D. another firefighter must stand by and act as a safety spotter in case the ladder starts to fall.
- _____ 42. Who generally places the ladder the correct distance from the building and is in charge of voicing commands when two firefighters work together to raise a ladder? (337) [4.3.6, 4.3.12]
- A. The heeler
 - B. A company officer
 - C. The firefighter at the tip
 - D. A third firefighter nearby

- _____ 43. When three firefighters work together to raise a ladder, one is at the tip, one is at the butt, and the third is positioned: (337) [4.3.6, 4.3.12]
- A. at the tip.
 - B. supporting the beam.
 - C. to the side to give commands.
 - D. as a heeler at the butt of the ladder.
- _____ 44. If enough personnel are available to have four firefighters raise a ladder,,: (337) [4.3.6, 4.3.12]
- A. a flat raise is normally used.
 - B. a beam raise is normally used.
 - C. the ladder should be raised at a 60-degree angle.
 - D. the ladder should be raised at the corner of the building.
- _____ 45. Shifting a ladder that is already in a vertical position: (338) [4.3.6, 4.3.12]
- A. must never be attempted.
 - B. always requires two firefighters.
 - C. should be limited to short distances.
 - D. should only be done in emergency situations.
- _____ 46. When properly climbing a ladder, the firefighter should look: (339) [4.3.6]
- A. toward the ladder tip and the beams.
 - B. forward and place his or her feet toward the center of the rungs.
 - C. forward with his or her arms straight, grasping alternate rungs.
 - D. toward the ladder tip with feet placed toward the center of the rungs.
- _____ 47. To safely climb an extension ladder, it is recommended to place your feet: (339) [4.3.6]
- A. near the beams with the halyard tied in the center of the rungs.
 - B. in the center of the rungs with the halyard tied in the center of the rungs.
 - C. near the beams with the halyard tied on the outside of the rungs near the beams.
 - D. in the center of the rungs with the halyard tied on the outside of the rungs near the beams.

- _____ 48. A ladder belt is designed to: (339) [4.3.6]
- A. make it easier to raise the fly of an extension ladder.
 - B. secure a firefighter who is heeling the ladder to the ladder beams.
 - C. secure a firefighter to a ladder while they are working from the ladder.
 - D. be worn around a firefighter's waist to carry tools or equipment up the ladder.
- _____ 49. How can a firefighter safely maintain constant hand contact with the ladder when carrying tools? (340) [4.3.6]
- A. Use a ladder belt to carry the tool
 - B. Slide the free hand along the beam
 - C. Use the rungs to balance the tools while ascending the ladder
 - D. Cradle the tool in the arm, maintaining contact with the ladder
- _____ 50. Before deploying a roof ladder, the: (340) [Add 4.3.6]
- A. fly must be extended.
 - B. hooks should be opened.
 - C. roof ladder must be hoisted to the roof.
 - D. roof ladder's halyard must be properly tied.
- _____ 51. What should be done when assisting a conscious victim down a ladder? (341) [4.3.9]
- A. Remove all other loads or activity on the ladder during the rescue
 - B. Rely on arm strength to keep the victim in place
 - C. Face the victim toward the rescuer and supported on the rescuer's knee
 - D. Use the cross-body or modified cross-body method to support the victim's head and legs
- _____ 52. When assisting an unconscious victim down a ladder, special consideration should be taken to: (341) [4.3.9]
- A. maintain the victim in a vertical position resting against the ladder.
 - B. try to help the victim regain consciousness before descending the ladder.
 - C. ensure that the ladder is heeled by at least four firefighters on the ground.
 - D. place the victim's feet outside the rails in order to prevent entanglement.

- _____ 53. When using the cross-body method of assisting an unconscious victim down a ladder, the: (342) [4.3.9]
- A. victim faces the ladder rather than facing the firefighter.
 - B. victim must be carried down by two firefighters at the same time.
 - C. firefighter's hands maintain contact with the ladder rails to keep the victim in place.
 - D. firefighter grasps the rungs and the victim rests across the top of the firefighter's arms.