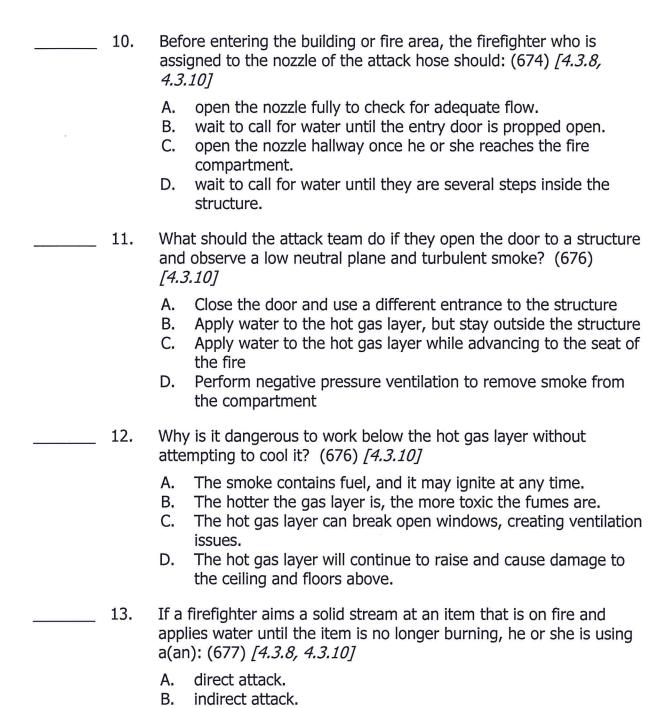
## **Chapter 14 Test**

Name:		Date:
Directions:	Write	the correct letter on the blank before each question.
	1.	When firefighters apply water to the hot gas layer in a compartment, it will: (670) [4.3.10]
		<ul> <li>A. push fire into adjacent rooms.</li> <li>B. increase the potential for flashover.</li> <li>C. reduce the radiant heat flux from the upper layer.</li> <li>D. increase the radiant heat flux from the upper layer.</li> </ul>
	2.	What can happen if excess steam is produced inside the structure as a result of applying water on the fire? (670) [4.3.10]
		<ul> <li>A. Pyrolysis process speeds up</li> <li>B. Disruption of the thermal layering</li> <li>C. Increase in the potential for backdraft or flashover</li> <li>D. Transition from fuel-limited to ventilation-limited conditions</li> </ul>
	3.	In which situation would fuel removal be a likely method of extinguishment? (670) [4.3.19]
		<ul><li>A. Grass fire</li><li>B. Warehouse fire</li><li>C. Fire in a one-story house</li><li>D. Fire in an apartment building</li></ul>
	4.	Closing the valve on a natural gas tank to stop the emission of gaseous fuel would be an example of: (670) [4.3.10]
		<ul><li>A. fuel removal.</li><li>B. oxygen exclusion.</li><li>C. temperature reduction.</li><li>D. chemical flame inhibition.</li></ul>

 5.	When a firefighter controls doors and windows during fire attack, it is an example of: (671) [4.3.10, 4.3.11]
	<ul><li>A. fuel removal.</li><li>B. oxygen exclusion.</li><li>C. temperature reduction.</li><li>D. chemical flame inhibition.</li></ul>
 6.	Clean agents extinguish fire by: (672) [4.3.10]  A. removing the burning fuel.
	<ul><li>B. cooling the burning material.</li><li>C. interrupting the combustion reaction.</li><li>D. removing oxygen from the compartment.</li></ul>
 7.	If you are positioned to make fire attack, which condition would be important to communicate to your supervisor or the Incident Commander? (673) [4.3.10]
	<ul> <li>A. Smoke that changes from gray to black</li> <li>B. Presence of bystanders at the perimeter</li> <li>C. Amount of radiant heat felt by firefighters</li> <li>D. All team members' PASS devices are functioning</li> </ul>
 8.	Firefighters should ensure that PASS devices are on and operating properly: (673) [4.3.10]
	<ul><li>A. before entering the structure.</li><li>B. before applying water to the fire.</li><li>C. once they reach the seat of the fire.</li><li>D. once they reach their "point of no return."</li></ul>
 9.	Which tool or piece of equipment is a member of a fire attack team likely to carry? (674) [4.3.10]
	<ul><li>A. PPV fan</li><li>B. Hand light</li><li>C. Power saw</li><li>D. Salvage cover</li></ul>



transitional attack.

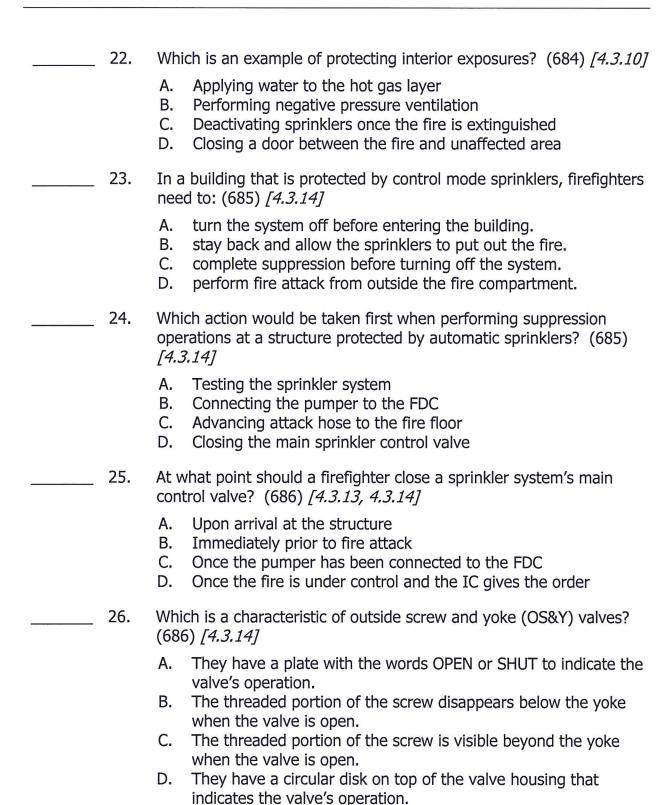
combination attack.

C.

 14.	If a firefighter aims a solid or straight stream at the ceiling so that water will rain down and extinguish the burning item, he or she is using a(an): (678) [4.3.10]
	<ul><li>A. direct attack.</li><li>B. indirect attack.</li><li>C. transitional attack.</li><li>D. combination attack.</li></ul>
 15.	Why should firefighters be outside the fire compartment when making an indirect attack from the interior? (678) [4.3.10]
	<ul><li>A. A large volume of steam will be created.</li><li>B. The hose stream will not reach the target if it is inside the fire compartment.</li></ul>
	<ul><li>C. Large volumes of water will make walking areas slippery and dangerous.</li><li>D. The fire compartment will not be large enough to conduct an effective indirect attack.</li></ul>
 16.	If a firefighter uses a Z pattern to apply water to the hot gas layer and then the burning fuels at the floor level, he or she is using a(an) fire attack. (679) [4.3.10]
	<ul><li>A. direct</li><li>B. indirect</li><li>C. transitional</li><li>D. combination</li></ul>
17.	Which type of fire attack involves applying water from the outside of the structure in order to reduce the potential for flashover and make the environment more survivable for an interior attack crew? (679) [4.3.10]
	<ul><li>A. Direct attack</li><li>B. Indirect attack</li><li>C. Transitional attack</li><li>D. Combination attack</li></ul>

 18.	When performing a transitional attack, a stream may be the best choice because it will not upset the thermal layering as much as other stream patterns. (679) [4.3.10]
	<ul><li>A. fog</li><li>B. broken</li><li>C. straight</li><li>D. shielded</li></ul>
 19.	Which statement describes a safety guideline for operations at a multistory building? (681) [4.3.10]
	<ul><li>A. Firefighters must not use an elevator to get to the fire floor.</li><li>B. Firefighters must not connect the hose to the standpipe on the fire floor.</li></ul>
	C. If the standpipe is in a protected stairwell, the hose must be connected on the floor above the fire.
	D. If the structure does not have a standpipe, firefighters must avoid using the stairwell nearest to the fire.
 20.	Which is a characteristic of fires in residential basements? (682) [4.3.10]
	A. The safest path into a basement fire is through an interior enclosed stairwell.
	B. Residential basement fires tend to be fuel-limited rather than ventilation-limited.
	C. Sounding the floor is the best way to determine whether it is safe to work on the floor above a basement fire.
	D. Firefighters working on the floor above the basement fire are at an increased risk of floor collapse.
 21.	Which method of attack would put firefighters at the least risk when fighting a residential basement fire? (683) [4.3.10]
	<ul> <li>A. Entering through an enclosed interior stairwell</li> <li>B. Applying water through an exterior basement window</li> <li>C. Entering on the first floor and installing a cellar nozzle</li> <li>D. Advancing down the stairwell while using a fog stream for</li> </ul>

protection

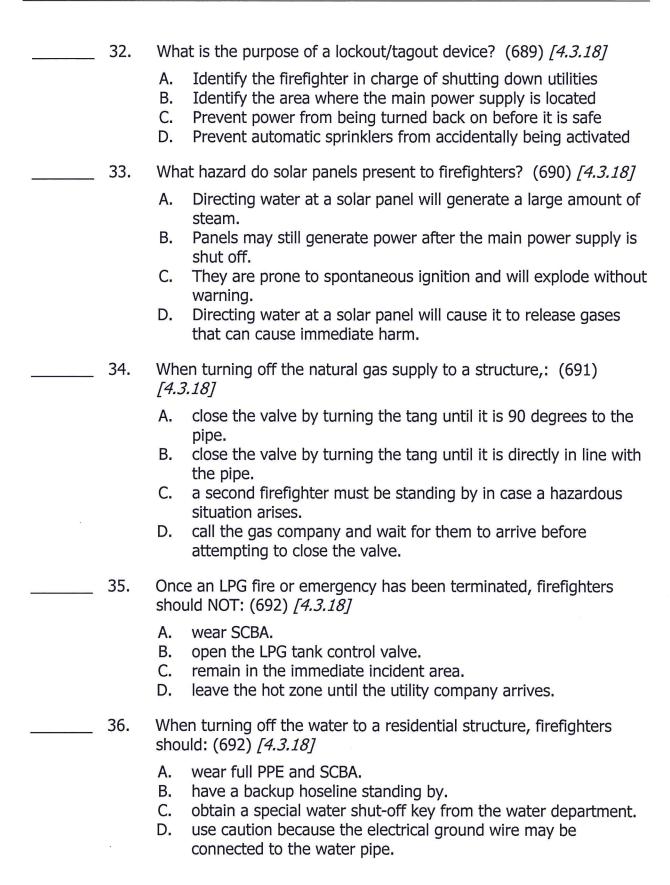


 27.	Which type of sprinkler control valve extends horizontally through the wall with the target and valve operating nut on the outside of the building? (687) [4.3.14]		
	<ul> <li>A. Post indicator valve (PIV)</li> <li>B. Wall post indicator valve (WPIV)</li> <li>C. Post indicator valve assembly (PIVA)</li> <li>D. Outside screw and yoke valve (OS&amp;Y)</li> </ul>		
 28.	Which tool or piece of equipment is commonly used to stop the flow of water from an activated sprinkler? (687) [4.3.14]  A. Pike pole B. Halligan tool C. Spanner wrench D. Wooden wedges		
29.	Why should the flow of water be stopped from activated sprinklers once the fire has been extinguished? (687) [4.3.13, 4.3.14]  A. Prevent reignition of the fire B. Prevent the sprinkler system from overloading C. Reduce the wear and tear on the sprinkler system D. Minimize water damage to the structure and its contents		
 30.	Who is in charge of turning building utilities back on after fire fighting operations are complete? (688) [4.3.18]  A. Fire Fighter I  B. Incident Commander  C. Utility company personnel  D. Building owner or manager		
31.	<ul> <li>A firefighter should not turn off electricity to an entire building until he or she is ordered to, because it: (689) [4.3.18]</li> <li>A. would be an inconvenience to occupants to have the utilities turned off.</li> <li>B. can cause unforeseen issues with forcible entry and overhaul operations.</li> <li>C. makes it harder for firefighters to work inside the building when</li> </ul>		

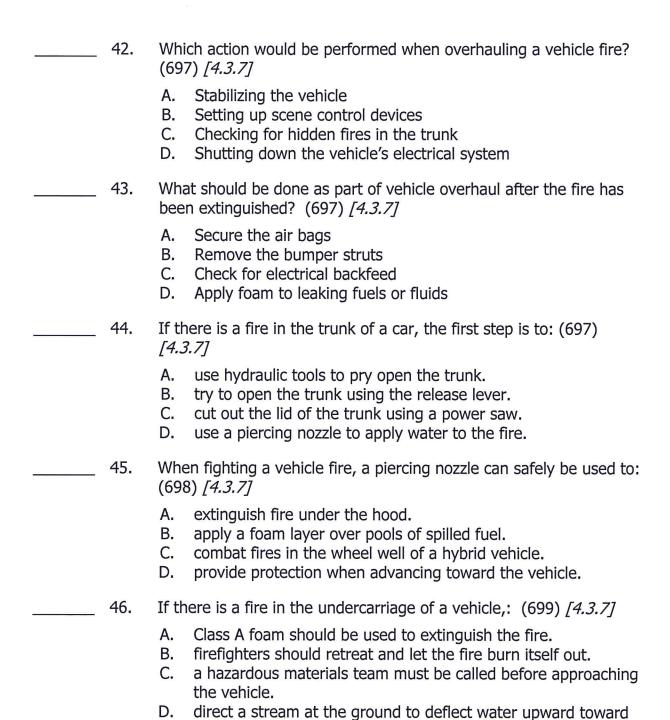
D. is necessary to operate essential systems such as elevators and

there is no electricity.

HVAC systems.



	37.	Which statement describes operations at a vehicle fire? (694) /			
		A. Vehicle fires pose fewer hazards to firefighters than structure fires do.			
		B. SCBA must be worn because of the toxic smoke and vapors that are produced.			
		C. The first priority at a vehicle fire is to enter the vehicle and turn off the ignition.			
		D. A hazardous materials team must be called in for every vehicle incident due to the presence of flammable fuels.			
	38.	Why should the bumper of a burning car be avoided? (695) [4.3.7]			
		<ul> <li>A. Heated bumper struts may explode and injure those nearby.</li> <li>B. Items inside the bumper are prone to spontaneous ignition.</li> <li>C. It is the location with the highest concentration of toxic gases.</li> <li>D. It is the location of the vehicle that is most likely to reignite after extinguishment.</li> </ul>			
-	39.	Extinguish any fire near the first when attacking a vehicle fire. (696) [4.3.7]			
		<ul><li>A. gas tank</li><li>B. occupants</li><li>C. windshield</li><li>D. engine compartment</li></ul>			
	40.	When attacking a passenger vehicle fire,: (696) [4.3.7]			
		<ul> <li>A. a 2½-inch (65 mm) or larger hoseline is required.</li> <li>B. firefighters should approach from downhill and downwind.</li> <li>C. a backup hoseline should be deployed as quickly as possible.</li> <li>D. firefighters should extinguish fire in the engine compartment first.</li> </ul>			
	41.	What vehicle hazard may require you to isolate the area and request assistance of a hazardous materials team? (697) [4.3.7]			
		<ul> <li>A. Downed electrical lines</li> <li>B. A hybrid-electric battery</li> <li>C. Fire in the engine compartment</li> <li>D. Large-capacity saddle fuel tanks</li> </ul>			



the underside of the vehicle until the fire is extinguished.

4	47.	How can firefighters identify whether or not a vehicle uses an alternative fuel? (699) [4.3.7]		
		<ul><li>A. Some alternative fuel vehicles have a visible logo on the front or rear of the vehicle.</li><li>B. Firefighters must memorize the models of cars that use</li></ul>		
		alternative fuel sources.  C. Alternative fuel vehicles have fuel tanks that are a different		
		shape than other vehicles.  D. All alternative fuel vehicles are required to have DOT placards identifying their fuel source.		
	48.	If an LNG tank on a vehicle leaks or is on fire, firefighters should: (701) [4.3.7]		
		<ul><li>A. stay clear of the vapor cloud.</li><li>B. allow the fire to burn itself out.</li><li>C. proceed with operations as normal.</li><li>D. apply water using a narrow fog pattern.</li></ul>		
	49.	Which hazard is associated with a hybrid electric vehicle that is of fire? (702) [4.3.7]		
		<ul><li>A. Toxic fumes</li><li>B. Invisible flames</li><li>C. Flammable air bags</li><li>D. Fuel tanks that rupture easily</li></ul>		
	50.	Which type of alternative vehicle fuel is colorless, odorless, and has an invisible flame during the day? (704) [4.3.7]		
		A. CNG B. LNG C. Biodiesel D. Hydrogen		
	51.	Which hazard is a concern when fighting fires in exterior stacked or piled Class A materials? (704) [4.3.8]		
		<ul><li>A. Collapse</li><li>B. Flashover</li><li>C. Backdraft</li><li>D. Electrocution</li></ul>		

-	52.		cking fire in stacked and piled materials, then apply lass A foam until extinguished. (705) [4.3.8]
		B. use ho C. advan	Class B foam or clean agents ooks or pike poles to break apart material ice until you are at least 10 feet (3 m) from the fire's edge ice until you are at least 5 feet (1.5 m) from the fire's
	53.		ed or other unattached structure is on fire, the primary s to: (706) [4.3.8]
		B. remov C. fight t	ct exposures.  Ye the fuel source.  The fire from the interior.  The contents of the building.
	54.	If there is a concern that an unattached structure contains hazardou chemicals or flammable/combustible liquids, firefighters should: (706) [4.3.8]	
		B. call fo C. go ins	ct exposures and let the structure self-extinguish.  or a hazardous materials team to perform salvage.  side to check for victims, and then vacate the area.  oam to extinguish the fire and coat the hazardous  ials.
	55.	Biological v (706) <i>[4.3.</i>	vaste and aerosol cans are hazards likely to be present in: 8]
		B. trash C. below	ge shed fires. container fires. grade structure fires. grade structure fires.
	56.	Trash conta (707) <i>[4.3.</i>	ainer fires are likely to be fought using Class A foam or: 8]

 57.	The three main influences on ground cover fire behavior are fuel type, topography, and: (708) [4.3.19]
	<ul><li>A. weather.</li><li>B. time of day.</li><li>C. number of personnel available.</li><li>D. type and amount of resources available.</li></ul>
 58.	A slow-moving, smoldering fire that burns dead organic matter on the soil in forested areas is called a fire. (709) [4.3.19]  A. flank B. crown C. ground D. surface
 59.	Which describes a crown fire? (710) [4.3.19]
	<ul> <li>A. Slow-moving, crawling fire in low-lying grass and vegetation</li> <li>B. Wind-driven, high-intensity fire that moves through the tree tops</li> </ul>
	C. Fast-moving fires in surface fuels such as moss and grass clippings
	D. Smoldering fires that can go undetected for months before they start flaming
 60.	With regard to ground cover fires,: (710) [4.3.19]
	<ul> <li>A. heavy fuels burn faster than light fuels.</li> <li>B. tightly compacted fuels burn slower than loosely piled fuels.</li> <li>C. the more moisture a fuel contains, the more intensely it will burn.</li> </ul>
	D. the fire will spread more quickly when it can jump between patches of fuels that are spread apart.
 61.	How does wind affect ground cover fire development? (710) [4.3.19]
	<ul> <li>A. Provides fresh air that speeds up combustion</li> <li>B. Helps extinguish the flames and cool the area</li> <li>C. Affects the moisture content of live and dead fuels</li> <li>D. Pushes smoke away from the fire area to allow for easier extinguishment</li> </ul>

 62.	How does topography (the earth's surface features) affect the spread of ground cover fires? (711) [4.3.19]
	<ul> <li>A. Fires on flat terrain are prone to the chimney effect.</li> <li>B. Fires spread faster going downhill than they do going uphill.</li> <li>C. Fires in canyons tend to spread slower because of a lack of wind and air flow.</li> <li>D. Fires on southern exposures receive more heat from the sun and burn faster than other fires.</li> </ul>
 63.	The part of a ground cover fire opposite the head that usually burns slowly and quietly is called the: (712) [4.3.19]
	<ul><li>A. heel.</li><li>B. flank.</li><li>C. black.</li><li>D. origin.</li></ul>
 64.	Patches of unburned fuel inside the perimeter of a ground cover fire are called: (713) [4.3.19]
	<ul><li>A. flanks.</li><li>B. greens.</li><li>C. islands.</li><li>D. fingers.</li></ul>
 65.	Which action would be done when creating a fire line? (714) [4.3.19]
	<ul> <li>A. Throw all burned material into the black.</li> <li>B. Scatter all unburned material into the black.</li> <li>C. Stop applying water to the fire until the line is complete.</li> <li>D. Clear only the top layer of burned fuels from the ground.</li> </ul>
 66.	Which is a component of the LCES technique for situational awareness at ground cover fires? (714) [4.3.19]
	<ul><li>A. Lightning</li><li>B. Communications</li><li>C. Exposures</li><li>D. SCRA</li></ul>

- \_\_\_\_\_ 67. During ground cover fire fighting operations, if an oil well or a pipeline is broken and exposed to fire, firefighters should: (717) [4.3.19]
  - A. apply Class A or B foam to any burning fuels.
  - B. apply water from a distance using a master stream device.
  - C. treat the situation like any other ground cover fire incident.
  - D. treat the situation like a hazardous materials incident and withdraw.
- \_\_\_\_\_ 68. Most line-of-duty deaths at ground cover fires result from: (717) [4.3.19]
  - A. lightning.
  - B. heart failure.
  - C. falling debris.
  - D. smoke inhalation.