

# **FIRE ACADEMY**

## **Candidate Preparation**

### **Questions Pertaining to Probationary Firefighter Reading Assignments (Cycles 1-26)**

#### **Cycle 10**

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**Choose the answer that is most correct**

#### **Chapter 8 and 9: Rowframe/Brownstone**

- 1) Wood (Yankee) gutters are found on most \_\_\_\_\_. They can be dangerous, since they are made of wood and then tarred over many times.
  - A) Rowframes
  - B) Brownstones
  - C) Both
  - D) Neither
- 2) The 1<sup>st</sup> floor doorway of a brownstone can be found \_\_\_\_\_.
  - A) Under the exterior stoop
  - B) At the top of the stoop stairs.
- 3) The ventilation points of a Brownstone cellar are possibly a coal chute, an opening under a grating near the 1<sup>st</sup> floor vestibule and a couple of very small windows at ground level in the \_\_\_\_\_ of the building.
  - A) Front
  - B) Rear
  - C) Sides
- 4) An iron ladder (usually in a closet) gives access from top floor to the roof through a \_\_\_\_\_.
  - A) Bulkhead
  - B) Eyebrow window
  - C) Scuttle
  - D) Parlor
- 5) A majority of Brownstones are flat construction with no rear parapet with an approximate cockloft of \_\_\_\_\_.
  - A) 1-2'
  - B) 2-3'
  - C) 3-4'
  - D) 1' to a height tall enough for a person to stand

- 6) The small front windows located on a brownstone when the roof slopes to the front is called a \_\_\_\_\_.
- A) Transom
  - B) Lexan
  - C) Plexiglass
  - D) Eyebrow
- 7) Rowframes are made of wood, built in rows sometimes of 20 or more and are balloon frame or \_\_\_\_\_ construction.
- A) Braced frame
  - B) Platform
  - C) Mortise and tenon
- 8) The salient feature in Rowframes is the common cockloft spreading over all buildings in a row. The height of this cockloft can be \_\_\_\_\_.
- A) 1-2'
  - B) 2-3'
  - C) 3-4'
  - D) 1' to a height tall enough for a person to stand
- 9) There are two Rowframe design type, a Brownstone type featuring 3 windows across the front per floor and a (n) \_\_\_\_\_ type featuring 4 windows across the front per floor.
- A) New Law tenement
  - B) Old law tenement
  - C) Non fireproof type
- 10) A Brownstone type Rowframe generally has \_\_\_\_\_ apartment(s) per floor.
- A) One
  - B) Two
  - C) Three
  - D) Four
- 11) The division walls between buildings are quite frequently no more than the equivalent of a partition wall with brick nogging present. This mortar most often is disintegrated and \_\_\_\_\_ against the spread of fire.
- A) Effective
  - B) Ineffective

## **Chapter 9: 1<sup>st</sup> & 2<sup>nd</sup> Engine Private Dwellings**

- 1) Private Dwellings were originally built for one or two families. The major weakness from a firefighting standpoint is the \_\_\_\_\_.
  - A) Class 4 construction
  - B) Class 3 construction
  - C) Open interior and unenclosed stairway
  - D) Fact that they may be semi-attached or attached.
- 2) Private Dwellings are usually 1 to 3 stories in height, generally rectangular although alterations and extensions are common their average dimensions are approximately \_\_\_\_\_.
  - A) 20x40'
  - B) 25x50'
  - C) 30x40'
  - D) 30x50'
- 3) The location of the cellar entrance in private dwellings is usually located \_\_\_\_\_.
  - A) in the rear of the building
  - B) at the side of the building
  - C) inside the building underneath the interior stairs.
- 4) Private dwellings built on a sloped terrain can cause communication and operational problems. A dwelling which has 2 or 3 stories in the front may have 3 or 4 stories in the rear. The \_\_\_\_\_ may be used as a point of reference as the difference in floor levels may not always be apparent from the front.
  - A) Top floor
  - B) Basement level
  - C) 1<sup>st</sup> floor
- 5) In a Straight Line Colonial private dwelling, the door that gives both access to the kitchen and to the cellar stairway is usually found \_\_\_\_\_.
  - A) In the front of the building
  - B) At the side of the building
  - C) At the rear of the building
- 6) Which of the following buildings would commonly have balloon construction? (more than one correct)
  - A) Straight line colonial
  - B) Cape style house
  - C) Queen Anne
  - D) Ranch house

- 7) A cupola or turret is a tower- like room with a round or dome shaped roof usually found in a \_\_\_\_\_ style house
- A) Queen Anne
  - B) Colonial
  - C) High Ranch
  - D) Cape style house
- 8) In a Cape style house, two dormers are normally found facing the street, these dormers usually indicate 2<sup>nd</sup> floor bedrooms. Portable ladder access to these bedrooms is best through windows on the \_\_\_\_\_ of the building.
- A) Front
  - B) Rear
  - C) Sides
- 9) Flat roof private dwellings may be found isolated, attached in pairs, or attached in a row occupying an entire block. Many of these attached dwellings were built with firewalls that \_\_\_\_\_ be relied on.
- A) Can
  - B) Can not
- 10) In private dwelling fires, control and management of the \_\_\_\_\_ is critical to a successful operation.
- A) Front door
  - B) Basement door
  - C) Windows
  - D) Interior stairs

## **Chapter 5: Single Slide/ Roof**

- 1) The single slide with the Life Saving Rope is used \_\_\_\_\_ when circumstances are such that alternative methods of removing oneself are denied
- A) Initially
  - B) As a last resort
- 2) **True or False:** The single slide with the Life Saving Rope can be used as a last resort for rescue pickup
- 3) Which of the following statements regarding the Single Slide from a building using a Life Saving Rope is incorrect?
- A) Place the backpack carrying case on the roof near the substantial object you plan to use.
  - B) Remove the snap hook from the pocket of the case.
  - C) Grasp the anti-chafing device and pull it through the window of the case
  - D) Secure the Life Saving Rope by taking a turn around a substantial object and tie a slippery hitch on the taut part of the rope.

- 4) After walking to the planned point of descent, place the anti-chafing device on the parapet, stand to the \_\_\_\_\_ of the rope and place the left elbow on the outer edge of the parapet and reach down and grasp the rope.
- A) Right
  - B) Left
- 5) How many turns of the rope around the hook should be made for a single slide?
- A) Two
  - B) Three
  - C) Four
  - D) Five
- 6) Once the gate is returned to the locked position, member will slide the right hand back along the rope approximately \_\_\_\_\_ inches and grasp the rope firmly.
- A) Four
  - B) Five
  - C) Six
  - D) Eight
- 7) **True and False:** Position the anti-chafing device on the parapet. The device lies flat with approximately five inches draped over the outer edge.

## Chapter 12: Relaying Water

- 1) A relay operation is one in which one pumper supplies water to another. Upon finding no viable water source, the officer or Engine Company Chauffeur transmits what signal via department radio and Handie-Talkie indicating the need to be supplied by another pumper?
- A) 10-20
  - B) 10-60
  - C) 10-70
  - D) 10-75
- 2) The supply pumper connects to a hydrant utilizing either the 10' or 35' hydrant connection. The necessary lengths of \_\_\_\_\_ hose are stretched from an outlet of the Supply Pumper to the Operating pumper's gated inlet on the pump panel side of the pumper.
- A) 1  $\frac{3}{4}$ "
  - B) 2  $\frac{1}{2}$ "
  - C) 3  $\frac{1}{2}$ "
  - D) 5"

- 3) Both the Supply pumper and the Operating pumper must remain in the \_\_\_\_\_ position. An exception to this is operations where head pressure needs to be overcome.
- A) Volume
  - B) Pressure
- 4) A relay procedure should accommodate two 2 ½" lines without intake pressure dropping below \_\_\_\_\_ psi.
- A) 10
  - B) 15
  - C) 20
  - D) 25
- 5) **True or False:** If possible, it is better to set up a relay operation before supplying handlines.

### Chapter 9 and 12: 1<sup>st</sup> and 2<sup>nd</sup> Engine Private Dwellings

- 1) Private Dwelling fires challenge the expertise of firefighting forces and require a coordinated team operation. Small rooms and narrow stairs are commonly found in these dwellings. Due to the need for speed and mobility, a \_\_\_\_\_ hoseline is recommended.
- A) 1 ¾"
  - B) 2 ½"
  - C) 2 ¾"
  - D) 3 ½"
- 2) In Private dwellings, due to the combustible nature of both interior and exterior building materials, fire can spread rapidly. The unprotected, \_\_\_\_\_ interior stairwell to the upper floors acts as a natural flue for fire spread.
- A) Open
  - B) Enclosed
  - C) Wooden
  - D) Concrete
- 3) In Private dwellings, for a first floor fire, the first hose should be stretched through the main entrance door to the first floor in order to extinguish the fire. The second hoseline is initially positioned and charged \_\_\_\_\_ the fire building as a back-up for the first hoseline, it can be used to extinguish any fire that may extend to the other floors or to exposures.
- A) Inside
  - B) Outside
  - C) Away from

4) What is the name of the following private dwellings?



- A) Queen Anne
- B) Cape style
- C) Ranch
- D) Straight line colonial

5) What is the name of the following private dwellings



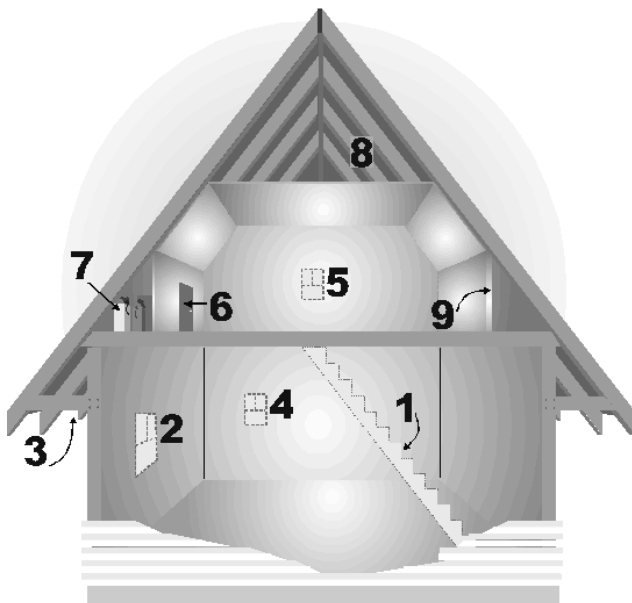
- A) Queen Anne
- B) Cape style
- C) Ranch
- D) Straight line colonial

6) What is the name of the following private dwellings



- A) Queen Anne
- B) Cape style
- C) Ranch
- D) Straight line colonial

7) In the following cross section of a private dwelling, which number indicates the eaves and provides no fire stopping?



- A) 3
- B) 6
- C) 8
- D) 9



## Chapter 16: 1<sup>st</sup> and 2<sup>nd</sup> Due Ladder Private Dwellings

- 1) In Private Dwelling fires, the 1<sup>st</sup> due Irons Firefighter carries which of the following tools?
  - A) 6 " hook and pressurized water extinguisher
  - B) Axe and halligan
  - C) Hydra-ram and halligan
  - D) Hydra-ram and maul
- 2) After gaining entrance through the main entrance door at a fire in a private dwelling, the door shall be controlled in a(n) \_\_\_\_\_ position by a member of the interior team.
  - A) Open
  - B) Closed
  - C) Chocked
- 3) For fires in *peaked roof* private dwellings, which of the following member(s) proceed to the side or rear and must visually examine cellar windows to determine interior fire conditions?
  - A) Can Firefighter
  - B) Outside vent firefighter and roof firefighter
  - C) Ladder company chauffeur and roof firefighter
  - D) Ladder company officer

## Chapter 8: Taxpayer Construction

### **Match the term with the correct definition (Questions 1-11)**

- |                              |                                 |                  |
|------------------------------|---------------------------------|------------------|
| A) Gypsum plank roof decking | B) Lightweight wood trusses     | C) Membrane      |
| D) Open web steel bar joist  | E) Parapet                      | F) Return        |
| G) Raised roof               | H) Terrazzo floor               | I) Built up roof |
| J) Metal "C" joists          | K) Gypsum concrete roof decking |                  |

- 1) \_\_\_\_ A roof which is considered inverted. It's supported by 2"x4" 's. The extent varies so as to provide proper drainage. The result is a large open cockloft where fire can spread easily.
- 2) \_\_\_\_ A polished covering made of small marble chips set in several inches of cement. A collapse hazard: it adds weight to floor beams, conceals the heat of a serious fire below and is watertight.
- 3) \_\_\_\_ Normally 2 inches thick, 2 feet wide, 8 feet long and factory laminated. Each plank weighs 135 lbs.
- 4) \_\_\_\_ Constructed of lightweight steel, approximately 1/16" thick and may have pre-drilled holes for plumbing and electric lines.
- 5) \_\_\_\_ Made of 2"x3" s or 2"x4" s which are held together with sheet metal gang nails or gusset plates. When exposed to high heat, fire or prolonged moisture, gang nails may pull away causing failure.

- 6) \_\_\_\_ The roofing material applied in sealed water-proof layers on the structural members of the roof.
- 7) \_\_\_\_ The portion of the wall continued above the roof line.
- 8) \_\_\_\_ Mill formulated and composed of calcined gypsum and wood chips or shavings. It is usually poured to a 2-inch thickness and weighs approximately 17.5 lbs. per square foot.
- 9) \_\_\_\_ The interior surface of a scuttle or skylight between the roof and top floor ceiling.
- 10) \_\_\_\_ Vulnerable to elevated temperatures and may collapse after only 5 or 10 minutes. Used to span long distances (up to 60'). Roofs with this type of roof support system must *not* be cut.
- 11) \_\_\_\_ Roofing material in roll form, consisting of asphalt, bituminous polymers of plastics and synthetics for strength. Roofs covered with this type of material are susceptible to ignition and rapid flame spread when exposed to flame.

## Chapter 14: Partner Saw

- 1) Which of the following regarding portable power saws is incorrect?
  - A) The saw has a high speed, four cycle engine using only gasoline
  - B) 20-30 minutes of operating time.
  - C) Special suction wick, allowing saw to operate regardless of position.
  - D) The saw is not to be started in an explosive atmosphere.
- 2) The portable power saw has three different types of blades. Which of the following is incorrect regarding the blades in use?
  - A) Carbide tip will cut through gravel and tar covered roofs, wood flooring, light sheet metal and similar material.
  - B) Carbide tip blades are placed out of service when 8 or more tips are broken or missing from the 24-tooth blade.
  - C) The Aluminum oxide blade will cut various types of steel, including auto bodies, metal security doors, metal window bars, etc.
  - D) The silicon carbide blade will cut through concrete and masonry materials and is painted green to differentiate from the Aluminum oxide blade.
- 3) The Aluminum oxide and Silicon carbide are abrasive blade discs. How many inches does the disc need to be worn to in order for it to be place OOS?
  - A) 9"
  - B) 12"
  - C) 8"
  - D) 10"

- 4) The firefighter who operates the saw will be assisted and/or guided by another member. The physical communication system between the Guide member and the operator will include all of the following signals except?
- A) One slap on the back of the operator..... Stop cut
  - B) Two slaps on the back of the operator..... Cut
  - C) Three slaps on the back of the operator.....Shut down saw
  - D) Four slaps on the back of the operator.....Change location of the cut

### Chapter 16: Search #3

- 1) Which one of the following is incorrect regarding a secondary search?
- A) It is thorough and painstakingly complete.
  - B) It is a search for life of all areas that required a primary search.
  - C) It includes the entire outside perimeter of the building and all shafts, basements, cellars, elevators, roofs, etc.
  - D) This search is rapid but thorough and systematic.
- 2) Which one of the following is correct regarding the implementation of a secondary search?
- A) The secondary search shall be performed by the same company that performed the primary search.
  - B) The secondary search should be performed by a well-rested later arriving engine company.
  - C) The secondary search shall be performed by a different company that performed the primary search.
  - D) The secondary search shall always be performed by the Rescue or Squad Company.
- 3) When is the most ideal time a secondary search should be completed?
- A) Before any extensive overhauling is completed.
  - B) After all extensive overhaul is completed.
  - C) Before the main body of fire is extinguished.
  - D) Immediately following the primary search.
- 4) Communication between all members and the need to monitor communications when conducting a search is imperative to improve the safety and efficiency of operations. To ensure the safety of the interior team, how many of the following tactics, performed by the outside team members are imperative? (more than one correct)
- A) The outside team must report the effect wind is having on smoke and fire.
  - B) The exterior size-up must be relayed to their officer.
  - C) The exterior size-up can also be relayed directly to the IC (Incident Commander) or Sector Supervisor.

- 5) Sound tactics by search team members can be found in which of the following choices? (more than one correct)
- A) Monitor Handie-talkie transmissions.
  - B) Maintain situational awareness.
  - C) Maintain status of water supply.
  - D) Maintain knowledge of the position of hoselines.
- 6) Which officer is responsible to supervise searches by controlling both the interior and exterior search teams and maintaining team integrity?
- A) Ladder Company Officer
  - B) Engine Company Officer
- 7) Which search team is controlled by immediate supervision via verbal communication and the use of the Thermal Imaging Camera?
- A) Interior search team
  - B) Exterior search team
- 8) Which search team is supervised through functional supervision by tracking member's progress via Handie-Talkie reports?
- A) Interior search team
  - B) Exterior search team
- 9) All search teams must have a plan in order to complete an effective search. A plan will enable members to achieve the main objectives of searching for life hazards and the location of fire. Members can orient themselves within the occupancy by practicing sound tactics. Which of the following is an incorrect tactic to be used while searching inside a structure?
- A) Know the exposure from which the member entered the building.
  - B) Know what floor the member is on.
  - C) Know the number of the apartment the member is searching in.
  - D) Conduct a survey on the floor above.
  - E) Note landmarks (radiators, large furniture...) within search area.
- 10) The term "situational awareness" will help the member in how many of the following? (more than one correct)
- A) Will help members perform a thorough search.
  - B) Will help members perform a systematic search.
  - C) Will allow members to maintain contact with other members.
  - D) Will allow members to provide details of their exact location in case the need for assistance should arise.

# Cycle 10 Answer Key

## Chapter 8-9: Rowframe/Brownstone Construction

1. B (CH8) pg. 16
2. A (CH9) pg. 13
3. B (CH9) pg. 13
4. C (CH9) pg. 15
5. B (CH9) pg. 15
6. D (CH9) pg. 15
7. A (CH9) pg. 23
8. D (CH9) pg. 23
9. B (CH9) pg. 23
10. A (CH9) pg. 23
11. B (CH9) pg. 25

## Chapter 9: 1<sup>st</sup> and 2<sup>nd</sup> Due Engine Private Dwelling

1. C (CH9) pg. 29
2. A (CH9) pg. 29
3. C (CH9) pg. 29
4. A (CH9) pg. 30
5. B (CH9) pg. 30
6. A and C (CH9) pg. 30 and 31
7. A (CH9) pg. 31
8. C (CH9) pg. 31
9. B (CH9) pg. 34
10. D (CH9) pg. 35

## Chapter 5: Single Slide/ Roof

1. B (CH5) pg. 80
2. False (CH5 sec 2.1 NOTES) pg. 89
3. D (CH5 sec 4) pg. 89
4. A (CH5 sec 4.6) pg. 90
5. C (CH5 sec 4.9 NOTES) pg. 90
6. C (CH5 sec 4.12) pg. 91
7. True (CH5 sec 4.14) pg. 91

## Chapter 12: Relaying Water

1. C (Ch12 sec 7.1) pg. 159
2. C (Ch12 sec 7.1) pg. 159
3. A (Ch12) pg. 160
4. B (Ch12) pg. 160
5. True (Ch12 sec 7.1 NOTES) pg. 160

**Chapter 9 and 12: 1<sup>st</sup> and 2<sup>nd</sup> Due Engine Private Dwelling**

1. A (CH12 Add 4 sec Private Dwellings) pg. 142
2. A (CH12 Add 4 sec Private Dwellings) pg. 142
3. B (CH12 Add 4 sec Private Dwellings) pg. 143
4. D (CH9) pg. 30
5. B (CH9) pg. 31
6. A (CH9) pg. 31
7. A (CH9) pg. 33

**Chapter 16: 1<sup>st</sup> and 2<sup>nd</sup> Due Ladder Private Dwelling**

1. B (CH16) pg. 26
2. B (CH16) pg. 26
3. B (CH16) pg. 26

**Chapter 8: Definitions**

1. G (CH8) pg. 32
2. H (CH8) pg. 34
3. A (CH8) pg. 24
4. J (CH8) pg. 26
5. B (CH8) pg. 27
6. I (CH8) pg. 32
7. E (CH8) pg. 31
8. K (CH8) pg. 24
9. F (CH8) pg. 31
10. D (CH8) pg. 28
11. C (CH8) pg. 32

**Chapter 14: Partner Saw**

1. A (CH14) pg. 11 and 12
2. D (CH14) pg. 11
3. C (CH14 sec 3) pg. 11
4. D (CH14) pg. 19

**Chapter 16: Search #3**

1. D (CH16 sec 1.5, sec 7, sec 6.1) pg. 100, 104 and 105
2. C (CH16 sec 7.3) pg. 105
3. A (CH16 sec 7.2) pg. 105
4. All (CH16 sec 8) pg. 105
5. All (CH16 sec 8.1) pg. 105
6. A (CH16 sec 9.1) pg. 106
7. A (CH16 sec 9.1) pg. 106
8. B (CH16 sec 9.1) pg. 106
9. D (CH16 sec 9.2) pg. 106
10. All (CH16 sec 9.2) pg. 106