



California Commercial Plumbing Inspector

Practice test

April 6, 2026

Time limit: 210 minutes

Official exam page

californiacerts.com/exams/ca-plumbing-inspector-i3

Online timed practice

californiacerts.com/exams/ca-plumbing-inspector-i3/practice

If the link does not open, copy and paste the full URL into your browser.

Answer key for this session (PDF):

californiacerts.com/resources/pdfs/ca-plumbing-inspector-i3/ca-plumbing-inspector-i3-practice-solution.pdf

1. A fuel-burning water heater is to be installed in a closet within a bathroom. According to Section 504.1, which of the following is NOT required for this installation?
 - A. The closet to be for the exclusive use of the water heater.
 - B. Combustion air obtained from the outdoors.
 - C. A listed self-closing device on the closet door.
 - D. The gasketing material to be from the published listings of the door manufacturer.
2. A 3-inch diameter vent stack receives the discharge from a 4-inch diameter soil stack. What is the minimum required size for the vent stack, provided that the soil stack is one pipe diameter larger than the vent stack?
 - A. 2 1/2 inches
 - B. 1 1/2 inches
 - C. 1 1/4 inches
 - D. 2 inches
3. A commercial kitchen with a 2-inch drain serving a three-compartment sink and a dishwasher requires a grease interceptor. The total fixture unit load for these fixtures is 6 DFUs. Using Table 1003.3(1), what is the minimum flow rate capacity, in gallons per minute, required for the grease interceptor?
 - A. 15 gpm
 - B. 25 gpm
 - C. 20 gpm
 - D. 35 gpm
4. What is the maximum allowable flow rate for a public lavatory faucet in California, except for metering faucets?
 - A. 1.2 gpm
 - B. 0.5 gpm
 - C. 1.5 gpm
 - D. 2.0 gpm

5. According to Section 313.0, when must piping passing through concrete or masonry be sleeved?
- Piping must be sleeved, unless it is designed to accommodate movement or has approved protective coatings.
 - Piping must always be sleeved when passing through concrete or masonry.
 - Only metallic piping must be sleeved when passing through concrete or masonry.
 - Piping must be sleeved only when passing through exterior walls.
6. According to CPC 210.0, which of the following is a required characteristic for lavatories in specified health care facilities?
- They must have an integrated soap dispenser.
 - They must be wall-mounted only.
 - They must have a minimum basin depth of 6 inches.
 - They must be constructed of nonporous material.
7. A wet-vented bathroom group includes a water closet, a lavatory, and a bathtub. The wet vent is provided by the lavatory drain. According to the 2022 CPC, what is the minimum required size for the horizontal wet vent piping serving this bathroom group?
- 3 inches
 - 1 1/2 inches
 - 2 inches
 - 1 1/4 inches
8. A new car wash facility is being planned. According to the 2022 CPC, which of the following statements about interceptors for this facility is correct?
- An interceptor is not required if the facility is connected to an approved oil/water separator.
 - A sand interceptor is required, but an oil interceptor is optional.
 - An interceptor is always required for a motor vehicle washing facility.
 - An interceptor is only required if the facility washes more than 10 vehicles per day.
9. According to Section 504.1, when is a fuel-burning water heater permitted to be installed in a bedroom closet without being a direct-vent type?
- If the closet has a listed, gasketed door with a self-closing device, obtains combustion air from outdoors, and is for the water heater's exclusive use.
 - If the water heater is electric and listed per UL 174.
 - Only if the closet has a standard interior door and a louver for ventilation.
 - It is never permitted; all bedroom installations must be direct-vent.
10. What is the maximum distance allowed between cleanouts on a horizontal drain of 4 inches or less in diameter, according to the 2022 CPC?
- 75 feet
 - 100 feet
 - 150 feet
 - 50 feet
11. What is the minimum required size for a leader (downspout) serving a roof drainage area of 900 square feet, assuming a rainfall intensity of 4 inches per hour?
- 5 inches
 - 4 inches
 - 3 inches
 - 2 inches
12. A gas water heater vent connector is made of galvanized steel and serves a low-heat appliance. According to Table 509.10.1.3, what is the minimum thickness required for this connector if the appliance input is 100,000 Btu/h?
- 0.024 inch
 - 0.015 inch
 - 0.019 inch
 - 0.030 inch
13. A new elementary school classroom building is being designed with an occupant load of 85 students. According to Table 422.1 Exception, what is the minimum number of drinking fountains required?
- 4
 - 2
 - 1
 - 3
14. What is the minimum required size for a building drain serving a total of 85 drainage fixture units, assuming it is installed with a slope of 1/4 inch per foot?
- 5 inches
 - 6 inches
 - 4 inches
 - 3 inches
15. A self-closing door assembly for a water heater closet must meet specific requirements. According to Section 504.1.1, which feature is prohibited?
- A latching mechanism.
 - A threshold and bottom door seal.
 - A hold-open feature on the closing mechanism.
 - The ability to swing easily and freely.

16. A plumbing contractor is sizing the drainage piping for a new restaurant. The kitchen area has a 3-compartment pot sink (2.5 DFU), a pre-rinse spray valve (4 DFU), and a floor drain (2 DFU) all connected to a single 3-inch horizontal branch. What is the total drainage fixture unit (DFU) load for this branch?
- A. 8.5 DFU
 - B. 10.5 DFU
 - C. 6.5 DFU
 - D. 12.0 DFU
17. According to the 2022 CPC, what is the minimum size of the water distribution pipe for a single flushometer valve serving a water closet?
- A. 1 inch
 - B. 3/4 inch
 - C. 1 1/2 inch
 - D. 1 1/4 inch
18. A new retail store with a total occupant load of 200 is being designed. According to Table 422.1, what is the minimum number of drinking fountains required?
- A. 1
 - B. 3
 - C. 4
 - D. 2
19. An indirect waste receptor is installed to receive drainage from a commercial food waste grinder. According to Section 812.1, what is the minimum required air gap between the waste outlet and the flood level rim of the receptor, unless the waste is from a single fixture with an outlet not exceeding 1 inch in diameter?
- A. Equal to the diameter of the outlet.
 - B. Twice the diameter of the outlet.
 - C. One inch.
 - D. An air break is permitted.
20. A floor-mounted, back-outlet water closet bowl is being installed. According to CPC 402.6.3, what is the minimum diameter required for the soil pipe?
- A. 4 inches
 - B. 3 inches
 - C. 2.5 inches
 - D. 2 inches
21. When connecting a roof drain to a combined sewer, what is the minimum required vertical distance between the flood level rim of the roof drain and the weir of the relief vent?
- A. 6 inches
 - B. 1 inch
 - C. 2 inches
 - D. 4 inches
22. A horizontal storm drain has a change of direction of 60 degrees. According to the 2022 CPC, what is required at this change of direction?
- A. No special requirement.
 - B. The pipe size must be increased one size.
 - C. A cleanout must be installed.
 - D. A relief vent must be installed.
23. A gas water heater with an input rating of 75,000 BTU/hr is being installed in a confined space. According to the 2022 CPC, what is the minimum required total free area of the combustion air openings when using the standard method with two openings?
- A. 75 square inches
 - B. 150 square inches
 - C. 50 square inches
 - D. 100 square inches
24. According to CPC Section 402.4, what type of supports are required for wall-hung fixtures?
- A. Metal supporting members
 - B. Concrete anchors only
 - C. Plastic brackets
 - D. Wooden framing members
25. A new 80-gallon electric water heater is being installed in a seismic zone. According to the 2022 CPC, where must the top seismic strap be located?
- A. Within the upper one-quarter of the water heater's height
 - B. Within the middle one-third of the water heater's height
 - C. At the very top of the water heater tank
 - D. Within the upper one-third of the water heater's height
26. A residential building has 3 bedrooms and 2.5 bathrooms. According to Table 501.1(2), what is the minimum required first-hour rating (in gallons) for a storage water heater?
- A. 49 gallons
 - B. 74 gallons
 - C. 38 gallons
 - D. 62 gallons

27. A commercial kitchen plans to install a 3-inch diameter drain for a sink. According to Table 703.2, what is the maximum number of drainage fixture units (dfu) that can be connected to this 3-inch horizontal branch?
- A. 36 dfu
 - B. 42 dfu
 - C. 20 dfu
 - D. 12 dfu
28. A water heater is installed in an attic. The access opening to the attic is 20 inches by 24 inches. Is this opening size compliant for servicing and replacement of the water heater?
- A. No, because the opening height is less than 30 inches.
 - B. Yes, because the area is 480 square inches which is sufficient.
 - C. Yes, because it is larger than the water heater dimensions.
 - D. No, because the opening width is less than 22 inches.
29. A trap for a laboratory sink is installed. According to the 2022 CPC, which of the following statements about its design is correct?
- A. It is exempt from the requirement to be self-scouring.
 - B. It must be the same size as the trap for a standard lavatory.
 - C. It must be a P-trap without any interior partitions.
 - D. It may be designed with a removable interior partition.
30. A 50-gallon gas water heater is being installed in a residential garage. According to the 2022 CPC, what is the required minimum clearance from the water heater to any combustible material on the sides and rear?
- A. 12 inches
 - B. 18 inches
 - C. 6 inches
 - D. 3 inches
31. According to Section 608.15, a vacuum relief valve is required for hot water storage tanks. What is the minimum required size of the vacuum relief valve, unless the valve is listed for a specific application?
- A. 1 inch
 - B. 3/8 inch
 - C. 3/4 inch
 - D. 1/2 inch
32. A horizontal branch drain serving three lavatories (1.5 DFU each) and one shower (2.0 DFU) is being sized. Using Table 703.2, what is the total drainage fixture unit load for sizing this branch?
- A. 5.0 DFU
 - B. 6.5 DFU
 - C. 4.5 DFU
 - D. 7.5 DFU
33. A gas water heater is being installed in an alcove. According to the 2022 CPC, what is the exception to the requirement for combustion air openings when the alcove opens into a room?
- A. A mechanical ventilation system can substitute for combustion air openings
 - B. No combustion air openings are required if the alcove is less than 50 cubic feet
 - C. The room can be considered the air supply if the door is undercut at least 1 inch above the floor
 - D. Combustion air can be taken from an adjacent attic space
34. A new office building with 85 male employees and 75 female employees is being designed. According to Table 422.1, what is the minimum number of water closets required for the female occupants?
- A. 5
 - B. 3
 - C. 2
 - D. 4
35. What is the maximum water consumption allowed for a urinal in California, except where the urinal is for children's use?
- A. 1.28 gpf
 - B. 1.0 gpf
 - C. 0.5 gpf
 - D. 0.125 gpf
36. What is the required standard for an oil-fired storage tank water heater, as referenced in Table 501.1(1)?
- A. CSA 721.10.1
 - B. UL 1453
 - C. UL 732
 - D. UL 174
37. A water heater relief valve discharge pipe terminates outside. The termination point must be between what minimum and maximum distances above the ground or floor surface?
- A. Not less than 6 inches and not more than 24 inches.
 - B. Not less than 4 inches and not more than 12 inches.
 - C. Not less than 18 inches and not more than 48 inches.
 - D. Not less than 12 inches and not more than 36 inches.

38. A horizontal drainage pipe changes direction from one horizontal plane to another. According to Section 706.3, what type of fitting is required for this change in direction?
- A. A short-sweep quarter bend.
 - B. A double sanitary tee.
 - C. A combination of approved fittings such as 45-degree wyes or long-turn T-Ys.
 - D. A sanitary tee.
39. A caulked-on closet ring (closet flange) is being installed. According to CPC 402.6.1, what is the minimum required thickness?
- A. 3/8 inch
 - B. 1/8 inch
 - C. 3/16 inch
 - D. 1/4 inch
40. According to CPC Section 402.5, what is the minimum clearance from the center of a water closet to a side wall or obstruction?
- A. 24 inches
 - B. 18 inches
 - C. 15 inches
 - D. 12 inches
41. A new office building is being designed with 125 male employees and 125 female employees. Using Table 422.1, what is the minimum number of water closets required for the female occupants?
- A. 6
 - B. 3
 - C. 4
 - D. 5
42. A gas-fired water heater with an input of 75,000 Btu/hr is being installed in a confined space. The room has no indoor combustion air openings. The installer plans to use two permanent outdoor air openings, one high and one low, communicating directly with the outdoors. What is the minimum free area required for EACH of these two openings?
- A. 18.75 square inches.
 - B. 37.5 square inches.
 - C. 1 square inch per 2,000 Btu/h of input.
 - D. 1 square inch per 1,000 Btu/h of input.
43. A building has a 6-inch diameter main soil stack. According to the 2022 CPC, what is the minimum required size for the stack vent serving this soil stack?
- A. 2 inches
 - B. 3 inches
 - C. 6 inches
 - D. 4 inches
44. According to Section 707.8, cleanouts are not required under what condition?
- A. On horizontal drainage lines installed above grade, unless the line ends at a fixture trap.
 - B. On building sewers less than 4 inches in diameter.
 - C. On vertical drainage stacks.
 - D. On lines serving only lavatories.
45. A new office building requires a water heater. The plans specify an indirect-fired water heater. According to the 2022 CPC, what is required for the primary water heater supplying the indirect-fired unit?
- A. A backflow prevention device
 - B. A temperature and pressure relief valve
 - C. A pressure-limiting device only
 - D. A vacuum relief valve
46. What is the minimum required air pressure for testing a DWV system with an air test, and how long must it hold without pressure loss?
- A. 5 psi for 15 minutes
 - B. 3 psi for 10 minutes
 - C. 10 psi for 30 minutes
 - D. 15 psi for 60 minutes
47. What is the minimum required size for a cleanout installed on a 6-inch diameter building drain?
- A. 5 inches
 - B. 4 inches
 - C. 3 inches
 - D. 6 inches
48. A trap for a commercial food grinder is being installed. According to the 2022 CPC, which of the following statements is true regarding its required cleanout?
- A. A cleanout is only required if the trap diameter is 3 inches or larger.
 - B. A cleanout is always required on the inlet side of the trap.
 - C. A cleanout is not required if the trap serves a listed trap standard fixture.
 - D. A cleanout is never required if the trap is accessible.

49. A new installation includes a trap for a lavatory. What is the maximum vertical distance permitted between the fixture outlet and the trap weir?
- A. 30 inches
 - B. 18 inches
 - C. 24 inches
 - D. 12 inches
50. What is the minimum required clearance between a water supply pipe and any sewer line when the pipes are run parallel in the same trench?
- A. 24 inches
 - B. 6 inches
 - C. 12 inches
 - D. 18 inches
51. A 3-inch diameter building sewer is to be installed parallel to a public water main. According to Table 807.2, what is the minimum required horizontal clearance between the outside of the building sewer pipe and the outside of the water main, provided that the water main is constructed of cast iron or ductile iron?
- A. 3 feet
 - B. 10 feet
 - C. 2 feet
 - D. 5 feet
52. A 2-inch diameter drainage pipe receives the discharge from a 1.5-inch diameter trap arm serving a lavatory. According to the 2022 CPC, what is the maximum allowable length of the 1.5-inch trap arm if it is installed with a slope of 1/4 inch per foot?
- A. 3 feet
 - B. 5 feet
 - C. 8 feet
 - D. 6 feet
53. A horizontal drain line is installed under a concrete floor slab. What is the minimum required cover over the top of the pipe, unless the pipe is installed in a trench or tunnel?
- A. 6 inches
 - B. 12 inches
 - C. 24 inches
 - D. 18 inches
54. A new hotel is being designed with 120 sleeping units. According to Table 422.1, what is the minimum number of bathtubs or showers required for a 'Hotel' occupancy, provided that each sleeping unit has private facilities?
- A. 90
 - B. 120
 - C. 60
 - D. 150
55. According to the 2022 CPC, which of the following fixtures is NOT required to be equipped with a trap?
- A. Water closet
 - B. Drinking fountain
 - C. Lavatory
 - D. Floor drain
56. A branch water pipe supplies two lavatories and one water closet with a flushometer tank. According to Table 610.3, what is the total water supply fixture unit (WSFU) load for this branch?
- A. 5.0 WSFU
 - B. 3.0 WSFU
 - C. 4.0 WSFU
 - D. 6.0 WSFU
57. A 3-inch diameter horizontal fixture drain serving a bank of three water closets has a total developed length of 25 feet. What is the minimum required slope for this drain?
- A. 1/8 inch per foot
 - B. 1/2 inch per foot
 - C. 1/16 inch per foot
 - D. 1/4 inch per foot
58. A new 75-gallon storage water heater is being installed in a closet. The closet has a door that opens into the room. What is the minimum required clearance in front of the water heater for access, inspection, and servicing?
- A. 30 inches
 - B. 18 inches
 - C. 24 inches
 - D. 12 inches
59. A new public library is being designed. According to Table 422.1, what is the minimum number of water closets required for a 'Library' occupancy with an occupant load of 150?
- A. 4
 - B. 3
 - C. 2
 - D. 1

60. According to the 2022 CPC, when is a backwater valve required on a building drain or building sewer?
- On all fixtures located in basements.
 - Only when the building sewer is 6 inches or larger in diameter.
 - When the fixture flood level rim is below the next upstream manhole cover.
 - When the fixture is more than 50 feet from the main stack.
61. A building's water distribution system requires a pressure-reducing valve. According to Section 608.2, where must an approved pressure-relief valve be installed in relation to the pressure-reducing valve?
- On both the supply and reduced-pressure sides.
 - On the reduced-pressure side of the pressure-reducing valve.
 - On the supply side of the pressure-reducing valve.
 - Downstream of the first fixture branch.
62. A 2-inch diameter individual vent for a lavatory connects to a vent stack. What is the maximum horizontal distance allowed from the lavatory trap weir to the vent connection, measured along the vent pipe?
- 10 feet
 - 6 feet
 - 3 feet
 - 5 feet
63. A water heater is being installed in an attic. According to the 2022 CPC, what is the minimum required clearance from the water heater to the ceiling above for service access, unless the appliance is listed for reduced clearance?
- 30 inches
 - 24 inches
 - 36 inches
 - 48 inches
64. What is the minimum center-to-center distance required between two urinals according to CPC Section 402.5?
- 24 inches
 - 18 inches
 - 30 inches
 - 12 inches
65. An air test is being performed on a new DWV system. The system is pressurized to 5 psi. According to CPC, how long must this pressure be maintained without showing a pressure drop?
- 5 minutes
 - 30 minutes
 - 10 minutes
 - 15 minutes
66. A commercial building's water heating system requires a temperature-limiting device. According to the 2022 CPC, what is the maximum temperature, in degrees Fahrenheit, to which the water can be heated for delivery to fixtures used for personal hygiene, such as lavatories and showers?
- 140°F
 - 120°F
 - 130°F
 - 110°F
67. According to CPC Section 402.5 Exception, which of the following installations is specifically exempted from being considered an obstruction when measuring clearances?
- Accessibility grab bars only
 - Paper dispensers only
 - Waste receptacles
 - Both paper dispensers and accessibility grab bars
68. A 6-inch diameter cast iron soil pipe is installed vertically through three floors. According to CPC Table 313.5, what is the maximum allowable spacing between supports for this vertical installation?
- 10 feet
 - 15 feet
 - 20 feet
 - 12 feet
69. A 2-inch diameter fixture drain from a lavatory is connected to a 3-inch horizontal branch drain. According to the 2022 CPC, what is the maximum distance the trap weir of the lavatory can be located from the vent connection, provided the fixture drain is sized according to Table 702.1?
- 8 feet
 - 10 feet
 - 5 feet
 - 6 feet
70. According to Section 312.0, when must piping be protected from corrosion?
- Piping must always be protected from corrosion.
 - Only metallic piping must be protected from corrosion.
 - Piping must be protected from corrosion only in underground installations.
 - Piping must be protected against corrosion, unless the material is inherently corrosion-resistant or has approved coatings.

- 71.** A new commercial building is being designed with a water heater located in a mechanical room. According to the 2022 CPC, what is the minimum required clearance from combustible material for a single-wall vent connector serving a low-heat appliance, unless the connector is protected by an approved method?
- A. 9 inches
 - B. 12 inches
 - C. 3 inches
 - D. 6 inches
- 72.** A plumbing system uses a combination waste and vent system for a floor sink in a commercial kitchen. According to the 2022 CPC, which of the following statements about such a system is correct?
- A. The horizontal branch drain length is unlimited.
 - B. It is permitted for fixtures on different floor levels.
 - C. It is permitted only where fixtures are on the same floor level and the horizontal branch drain length meets specific limits.
 - D. It requires a separate vent stack for each fixture.
- 73.** A 4-inch diameter building drain is installed under a concrete slab-on-grade floor. According to the 2022 CPC, what is the minimum required slope for this drain?
- A. 1/2 inch per foot
 - B. 1/8 inch per foot
 - C. 1/16 inch per foot
 - D. 1/4 inch per foot
- 74.** A 3-inch diameter Type L copper water distribution pipe is installed in an exterior wall of a building in Climate Zone 13. According to CPC requirements for protection from freezing, which of the following statements is correct regarding insulation of the pipe?
- A. The pipe must be insulated in accordance with the California Energy Code.
 - B. The pipe must be wrapped with heat tape and insulated.
 - C. No protection is required if the pipe is located more than 12 inches from the exterior wall surface.
 - D. The pipe must be drained when temperatures are forecast to drop below freezing.
- 75.** What is the minimum clearance required between piping and electrical conduits to prevent damage or interference?
- A. 1 inch
 - B. 6 inches
 - C. 2 inches
 - D. 12 inches
- 76.** What is the minimum required size for a water service pipe serving a one-family dwelling, unless a larger size is required to meet the demand of the fixtures?
- A. 1 inch
 - B. 3/4 inch
 - C. 1/2 inch
 - D. 5/8 inch
- 77.** According to CPC Section 312.0, when a water test is performed on a drainage system, what is the minimum required duration for the test after the system is filled and any initial leaks are corrected?
- A. 2 hours total.
 - B. 15 minutes total.
 - C. 1 hour total.
 - D. 30 minutes total (15 minutes initial, then 15 minutes additional).
- 78.** A new commercial kitchen is being installed with a floor sink to receive indirect waste from a food waste disposer. According to the 2022 CPC, what is the minimum trap size required for this floor sink?
- A. The same size as the fixture drain
 - B. 2 inches
 - C. 3 inches
 - D. 1-1/2 inches
- 79.** A 1 1/2 inch diameter vent pipe connects to a 3-inch diameter stack vent. What is the minimum required size for the vent pipe connection fitting?
- A. 3 inches
 - B. 1 1/4 inches
 - C. 1 1/2 inches
 - D. 2 inches
- 80.** A theater with 450 seats is being designed. According to Table 422.1, what is the minimum number of water closets required for the male occupants, assuming equal gender distribution?
- A. 2
 - B. 3
 - C. 5
 - D. 4
- 81.** A plumbing inspector is reviewing plans for a new commercial kitchen. The plans show a 2-inch diameter floor drain installed in the kitchen area. According to the 2022 CPC, what is the minimum size trap required for this floor drain?
- A. 2 inches
 - B. The same size as the fixture drain
 - C. 1-1/2 inches
 - D. 3 inches

82. According to Chapter 6, backflow protection for the water supply system is not required for multipurpose or stand-alone sprinkler systems under which condition?
- A. When the system serves a residential occupancy only.
 - B. When the system is connected to a dedicated fire service line.
 - C. When the system is installed as part of the water distribution system and has no fire department connection.
 - D. When the system uses antifreeze as part of its design.
83. A building has 12 lavatories, 8 water closets, 6 urinals, and 4 service sinks. Using Table 610.3, what is the total water supply fixture unit (WSFU) load for calculating the cold water demand for these fixtures?
- A. 52 WSFU
 - B. 72 WSFU
 - C. 64 WSFU
 - D. 58 WSFU
84. According to CPC 210.0, handwashing fixtures used by medical and nursing staff, patients, and food handlers must have fittings that can be operated without the use of hands. Which of the following control types is explicitly permitted for this purpose unless otherwise noted in Table 4-2?
- A. Sensor-operated fixtures only
 - B. Wrist or elbow blades
 - C. Knee-operated levers
 - D. Foot pedals
85. A drain pan is installed under a water heater. According to the 2022 CPC, what is the minimum required diameter of the drain pipe from the pan?
- A. 1/2 inch
 - B. 3/4 inch
 - C. 1-1/4 inches
 - D. 1 inch
86. A new car wash facility is being planned with three automatic washing bays. Each bay will discharge an estimated 450 gallons per hour of wastewater containing sand, grit, and greasy compounds. What is the minimum required liquid capacity, in gallons, for the interceptor serving these bays?
- A. 4050 gallons
 - B. 2700 gallons
 - C. 2000 gallons
 - D. 1350 gallons
87. Storm drainage piping shall not be installed in or under a building unless it conforms to one of the following conditions, EXCEPT:
- A. Installed under a basement or cellar floor.
 - B. Enclosed within a wall cavity without an access panel.
 - C. A leader that does not exceed 10 feet in length.
 - D. Installed in a crawl space with at least 18 inches of clearance.
88. A 4-inch diameter building drain is installed with a cleanout. According to the code, what is the maximum distance between cleanouts on this horizontal drain line, except where the cleanout is installed at the base of a stack?
- A. 50 feet
 - B. 150 feet
 - C. 75 feet
 - D. 100 feet
89. For handwashing fixtures in specified health care facilities, CPC 210.0 states that faucets shall not be equipped with an aerator but may be equipped with what alternative device?
- A. A non-aerating laminar flow device
 - B. A vacuum breaker
 - C. A flow restrictor only
 - D. A spray head attachment
90. A trap serving a commercial lavatory is installed. What is the maximum vertical distance permitted between the fixture outlet and the trap weir?
- A. 24 inches
 - B. 12 inches
 - C. 18 inches
 - D. 30 inches
91. A 3-inch diameter building sewer is being installed. What is the minimum required slope for this pipe, according to Section 710.4?
- A. 1/4 inch per foot
 - B. 1/2 inch per foot
 - C. 1/16 inch per foot
 - D. 1/8 inch per foot
92. What is the minimum required slope for a horizontal vent pipe that is 2 inches in diameter?
- A. 1/8 inch per foot
 - B. Level, with no slope required
 - C. 1/2 inch per foot
 - D. 1/4 inch per foot
93. For a storm drainage system, conductors and leaders may be used as vents for the sanitary drainage system under which of the following conditions?
- A. Only when the storm drain is oversized by one pipe size.
 - B. Only where permitted in Section 905.0 for venting the sanitary drainage system.
 - C. Under no conditions; it is prohibited.
 - D. Only for residential buildings of three stories or less.

94. A 2-inch diameter vent stack connects to a 4-inch diameter building drain. What is the minimum required horizontal distance from the base of the vent stack to the connection of the building drain to the building sewer, unless the vent stack is connected to the building drain with a wye fitting and a 45-degree elbow?
- A. 5 feet
 - B. 10 feet
 - C. 15 feet
 - D. 3 feet
95. A 2-inch diameter vent stack for a three-story building passes through a roof. According to the 2022 CPC, what is the minimum required height above the roof for this vent termination, provided it is not within 10 feet of a vertical surface?
- A. 6 inches
 - B. 24 inches
 - C. 18 inches
 - D. 12 inches
96. A 3-inch diameter steel pipe passes through a concrete foundation wall. A sleeve is installed. According to CPC Section 312.0, what material is required for the annular space between the sleeve and the pipe?
- A. Expanding foam insulation.
 - B. An approved flexible material.
 - C. It may be left empty.
 - D. Grout or mortar.
97. A circuit vent is installed to serve a battery of six lavatories. According to the 2022 CPC, what is the minimum required size for the circuit vent, provided that the drain is 3 inches in diameter and the vent connects to a vent stack?
- A. 1 1/2 inches
 - B. 2 inches
 - C. 2 1/2 inches
 - D. 1 1/4 inches
98. According to Section 605.10, joints between different piping materials must be made with approved fittings, except when which of the following conditions is met?
- A. When the joint is made by a licensed contractor.
 - B. When the joint is between copper tubing and galvanized steel pipe using a dielectric union.
 - C. When the joint is within a wall cavity.
 - D. When the joint is above ground.
99. During a water test of a DWV system, the inspector notes that a 3-inch diameter vertical stack is 28 feet in length from the lowest to the highest point of the test. What is the minimum required test pressure at the lowest point of this system?
- A. A pressure equivalent to a 10-foot head of water.
 - B. 15 psi.
 - C. A pressure equivalent to a 28-foot head of water.
 - D. 5 psi.
100. A building has a roof designed with parapets that cause water to pond. According to the 2022 CPC, secondary drainage is required to prevent accumulation of excessive rainwater. Which of the following is NOT an acceptable method for providing this secondary drainage?
- A. A secondary system of roof drains and pipes
 - B. An overflow drain connected to the primary roof drain system
 - C. Scuppers
 - D. Installing additional drains at a higher elevation on the roof