

California Commercial Plumbing Inspector

Practice Test

March 30, 2026

Time limit: 210 minutes

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

Exam overview: californiacerts.com/exams/ca-plumbing-inspector-i3

Solution key: <https://californiacerts.com/resources/pdfs/ca-plumbing-inspector-i3/ca-plumbing-inspector-i3-practice-solution.pdf>

- 1.** What is the minimum required size for a trap serving a commercial kitchen sink with a waste outlet of 1-1/2 inches?
 - A. 2-1/2 inches
 - B. 1-1/2 inches
 - C. 2 inches
 - D. 1-1/4 inches

- 2.** A sump pump for a sewage ejector system discharges into a 2-inch diameter discharge line. According to Section 710.7, what is the minimum required size for the discharge line?
 - A. 3 inches
 - B. 2 inches
 - C. 1-1/2 inches
 - D. 1-1/4 inches

- 3.** According to the 2022 CPC, when is a sump or receiving tank required for a sewage ejector system?
 - A. When fixtures are installed below the upstream sewer manhole or septic tank inlet.
 - B. When fixtures are more than 100 feet from the building drain.
 - C. When the total drainage load exceeds 100 DFU.
 - D. When a grease interceptor is required.

- 4.** 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

- 5.** 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

- 6.** 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

7. 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

8. A designer is sizing a roof drain for a 150 ft by 100 ft commercial roof (15,000 sq ft). Using Table 1106.6 for roof drains with a 4-inch vertical outlet, and assuming a rainfall rate of 4 inches per hour, what is the maximum allowable drainage area per drain?

- A. 10,400 square feet
- B. 7,500 square feet
- C. 5,200 square feet
- D. 3,600 square feet

9. For handwashing fixtures in specified health care facilities, CPC 210.0 requires faucets to be equipped with gooseneck spouts. When the spout is deck or fixture-mounted, what is the minimum required height of the discharge point above the bottom of the basin?

- A. 12 inches above the bottom of the basin
- B. 8 inches above the fixture rim
- C. 10 inches above the bottom of the basin
- D. 5 inches above the fixture rim

10. 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

11. A 3-inch diameter fixture drain from a commercial mop sink requires a trap. According to Table 1002.1, what is the minimum required trap size?

- A. 3 inches
- B. 1-1/2 inches
- C. 4 inches
- D. 2 inches

12. A water heater is installed on a roof. What is the minimum required clearance from the roof edge for the appliance?

- A. 3 feet, unless approved guards or railings are installed.
- B. No specific setback is required if the roof is flat.

- C. 4 feet
- D. 2 feet

13. According to CBC 11B, what is the required clearance from the centerline of a water closet to any side wall or partition for an accessible toilet compartment, unless the compartment is for children's use?

- A. 15 to 17 inches
- B. 17 to 19 inches
- C. 18 to 20 inches
- D. 16 to 18 inches

14. 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.

15. A 3-inch diameter horizontal drain serving water closets is installed with a cleanout. What is the maximum permitted distance between cleanouts on this drain line?

- A. 75 feet
- B. 200 feet
- C. 100 feet
- D. 50 feet

16. 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

17. According to CPC 210.0, blade handles used for wrist or elbow operation on handwashing fixtures must have a minimum length of:

- A. 5 inches
- B. 4 inches
- C. 3 inches
- D. 6 inches

18. A 3-inch diameter cast-iron soil pipe is installed horizontally. Using Table 313.1, what is the maximum allowable hanger spacing?

- A. 10 feet
- B. 8 feet
- C. 12 feet
- D. 15 feet

19. According to Section 312.0, when must piping be protected from corrosion?

- A. Piping must always be protected from corrosion.

- B. Only metallic piping must be protected from corrosion.
- C. Piping must be protected from corrosion only in underground installations.
- D. Piping must be protected against corrosion, unless the material is inherently corrosion-resistant or has approved coatings.

20. 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

21. According to CPC 402.10, what is the minimum required dimension for an access panel or utility space providing access to concealed slip joint connections?

- A. 6 inches
- B. 24 inches
- C. 12 inches
- D. 18 inches

22. 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

23. A Type B accessible lavatory is being installed in a public restroom. According to CBC 11B, what is the required minimum vertical clearance beneath the lavatory to provide knee clearance, except where the lavatory is for children's use?

- A. 30 inches
- B. 24 inches
- C. 34 inches
- D. 27 inches

24. A 4-inch diameter soil stack vent is installed. What is the minimum required size for a relief vent connected to this stack?

- A. 4 inches
- B. 2 inches
- C. 1 1/2 inches
- D. 3 inches

25. 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.

- 26.** A designer is selecting a roof drain for a building. The roof construction is 8 inches thick and will be used as a pedestrian terrace. According to the 2022 CPC, what factors are required to be considered when selecting the type of roof drain?
- A. The proximity to vent stacks and the pipe material.
 - B. The color of the roofing membrane and the local rainfall rate.
 - C. The roof construction, its thickness, and the intended use of the roof.
 - D. The wind load rating and the snow load capacity.
- 27.** A relief vent is installed for a soil stack that is 4 inches in diameter. What is the minimum required size for the relief vent, provided it connects between the soil stack and the vent stack?
- A. 1 1/2 inches
 - B. 2 1/2 inches
 - C. 2 inches
 - D. 1 1/4 inches
- 28.** What is the maximum distance allowed between cleanouts on a horizontal drain of 4 inches or less in diameter, according to the 2022 CPC?
- A. 75 feet
 - B. 100 feet
 - C. 150 feet
 - D. 50 feet
- 29.** A circuit vent is installed to serve a battery of three water closets. According to the 2022 CPC, what is the minimum size required for the circuit vent, and under what condition can it be reduced?
- A. 2 inches, except it can be one-half the diameter of the drain when connecting to a stack vent or vent stack.
 - B. 2 inches, with no provision for reduction.
 - C. 3 inches, except for residential applications where it can be 2 inches.
 - D. 1 1/2 inches, provided it serves no more than two fixtures.
- 30.** A 50-gallon storage-type water heater is being installed in a residential garage. According to the seismic strapping requirements, what is the minimum required distance from the top of the water heater that the upper seismic restraint must be located?
- A. Within the upper one-quarter of the appliance's height.
 - B. Within 6 inches from the top of the appliance.
 - C. Within the upper one-third of the appliance's height.
 - D. At the exact midpoint of the appliance's height.
- 31.** 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.
- 32.** 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

- 33.** A building sewer is installed with a slope of 1% (1/8 inch per foot). According to Section 718.1, what is the minimum required slope for a building sewer?
- A. 1/2 inch per foot
 - B. 1/8 inch per foot
 - C. 1/16 inch per foot
 - D. 1/4 inch per foot
- 34.** A 40-gallon water heater is being installed on a wood-framed floor in a residential closet. According to the 2022 CPC, what is the required minimum clearance between the bottom of the water heater and the combustible floor?
- A. 12 inches
 - B. 6 inches
 - C. 2 inches
 - D. 0 inches (direct contact permitted)
- 35.** A water distribution system for a small office building is being sized. The system has a total demand of 35 water supply fixture units (WSFU). Using Table 610.4 for copper tubing (Type L), what is the minimum size for the building supply pipe if the developed length is 80 feet?
- A. 2 inch
 - B. 1 1/4 inch
 - C. 1 1/2 inch
 - D. 1 inch
- 36.** 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
- 37.** 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.
- 38.** A commercial building has a total connected fixture unit load of 850 on its 6-inch diameter building drain. According to Table 710.1(1), what is the maximum allowable fixture unit load for this pipe size when connected to a public sewer?
- A. 500 fixture units
 - B. 1920 fixture units
 - C. 850 fixture units
 - D. 1400 fixture units
- 39.** A 3/4-inch Type L copper tube water distribution pipe has a developed length of 60 feet and serves a branch with a total demand of 8 water supply fixture units (WSFU). Using Table 610.4 and the conditions in Section 610.7, what is the approximate maximum allowable pressure loss per 100 feet for this pipe?
- A. 5 psi
 - B. 8 psi
 - C. 2.5 psi
 - D. 4 psi

40. 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.

41. 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.

42. A 2-inch diameter wet vent receives the discharge from a water closet and a lavatory on the same floor. According to the 2022 CPC, what is the minimum size required for the wet vent, and what is the exception?

- A. 2 inches, except for vents serving only lavatories which can be 1 1/2 inches.
- B. 1 1/2 inches, except for vents serving water closets which must be 2 inches.
- C. 1 1/4 inches, with no exceptions.
- D. 2 inches, except for wet vents in individual dwelling units which can be 1 1/4 inches.

43. What is the minimum clear space required in front of a lavatory according to CPC Section 402.5?

- A. 15 inches
- B. 21 inches
- C. 18 inches
- D. 24 inches

44. A 3-inch diameter vent stack extends through a roof. What is the minimum required height above the roof for this vent, unless the roof is used for purposes other than weather protection?

- A. 6 inches
- B. 24 inches
- C. 12 inches
- D. 18 inches

45. 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

46. What is the minimum required size for a building sewer cleanout according to the 2022 CPC?

- A. 3 inches for pipes 3 inches and smaller, 4 inches for larger pipes.
- B. 4 inches, regardless of pipe size.
- C. The same size as the pipe served, but not less than 2 inches.
- D. The same size as the pipe served up to 4 inches; for larger pipes, not less than 4 inches.

- 47.** An island fixture vent is installed for a kitchen sink. According to the 2022 CPC, which of the following is a requirement for the installation of an island fixture vent?
- A. The vent must connect directly to the building drain.
 - B. The vent pipe must be the same size as the drainage pipe.
 - C. The vent is not required to extend through the roof.
 - D. The vent must extend vertically to a minimum of 6 inches above the flood level rim before offsetting.
- 48.** 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
- 49.** What is the minimum required size for a leader or downspout serving a roof drainage area of 1,200 square feet, according to the 2022 CPC?
- A. 3 inches
 - B. 5 inches
 - C. 2 inches
 - D. 4 inches
- 50.** 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.
- 51.** 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
- 52.** A horizontal change in direction of 90 degrees in a 3-inch drainage pipe is required. Which of the following fittings is NOT approved for this change according to Section 706.0?
- A. A long-turn elbow (1/4 bend)
 - B. A wye fitting
 - C. A sanitary tee
 - D. A single hub fitting
- 53.** 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

- 54.** An installer is connecting a temperature and pressure relief valve to a water heater. According to the code, the discharge pipe from the relief valve must be of what material?
- A. Schedule 40 PVC.
 - B. Galvanized steel, copper, or CPVC.
 - C. Any material suitable for potable water distribution.
 - D. Materials listed in Table 604.5 or approved per ASME A112.4.1.
- 55.** 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?
- A. 5 inches
 - B. 6 inches
 - C. 4 inches
 - D. 3 inches
- 56.** 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
- 57.** What is the minimum required air gap for a water distribution system where the effective opening of a potable water outlet is 1 inch in diameter and it discharges into a non-pressure-type receiving tank?
- A. 1.5 inches
 - B. 3 inches
 - C. 2 inches
 - D. 1 inch
- 58.** 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
- 59.** 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?
- A. 10 feet
 - B. 15 feet
 - C. 20 feet
 - D. 12 feet
- 60.** 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.
- 61.** A circuit vent is being installed for a battery of four lavatories. The horizontal branch being vented is 3 inches in diameter. According to the 2022 CPC, what is the minimum required size for the circuit vent?
- A. 2 inches

- B. 1 1/2 inches
- C. 1 1/4 inches
- D. 2 1/2 inches

62. A 4-inch diameter horizontal drainage pipe is installed with a slope of 1/8 inch per foot. According to the 2022 CPC, is this installation acceptable for a building drain?

- A. No, because 4-inch pipe requires a minimum slope of 1/2 inch per foot.
- B. Yes, because 4-inch pipe requires a minimum slope of 1/8 inch per foot.
- C. No, because all horizontal drainage piping requires a minimum slope of 1/4 inch per foot.
- D. Yes, but only if it is a building sewer, not a building drain.

63. According to Section 312.0, when must piping be protected from freezing?

- A. Piping must be protected from freezing only when exposed to temperatures below 20°F.
- B. Piping must always be protected from freezing, regardless of location.
- C. Piping must be protected from freezing only when located underground.
- D. Piping in exterior walls or other locations subjected to freezing temperatures must be protected, unless it is located in a heated space.

64. According to CBC 11B, what is the required mounting height for the side wall grab bar at a water closet, measured from the finish floor to the top of the gripping surface, unless the bar is installed in a dwelling unit?

- A. 33 to 36 inches
- B. 30 to 34 inches
- C. 18 to 27 inches
- D. 36 to 40 inches

65. What is the minimum required slope for a trap arm from a water closet to its vent connection?

- A. 1/2 inch per foot
- B. 1/4 inch per foot
- C. 1/8 inch per foot
- D. Water closet trap arms do not require a specific slope.

66. According to CPC 404.2, where must the overflow pipe from a fixture be connected?

- A. Directly to the building drain.
- B. To the vent stack.
- C. To the discharge side of the fixture trap.
- D. To the house or inlet side of the fixture trap.

67. 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?

- A. 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.
- B. If the water heater is electric and listed per UL 174.
- C. Only if the closet has a standard interior door and a louver for ventilation.
- D. It is never permitted; all bedroom installations must be direct-vent.

68. A new auto repair shop is installing a floor drain in its service bay. According to the 2022 CPC, which of the following is required for this drain?

- A. A sand interceptor only, unless the floor is sloped.
- B. No interceptor is required if the drain is connected to a sanitary sewer.
- C. A trap with a minimum size of 3 inches.
- D. An oil interceptor.

69. 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

70. When testing a DWV system with a water test, what is the minimum height of the water column required at the highest point of the system?

- A. 20 feet
- B. 15 feet
- C. 10 feet
- D. 5 feet

71. What is the minimum required horizontal clearance between a water service pipe and a building sewer constructed of cast iron or other approved material?

- A. 3 feet
- B. 5 feet
- C. 2 feet
- D. 10 feet

72. A 3-inch diameter horizontal branch drain serves fixtures totaling 35 drainage fixture units (dfu). Using Table 906.1, what is the minimum required size for a vent serving this branch?

- A. 1 1/4 inches
- B. 1 1/2 inches
- C. 2 inches
- D. 3 inches

73. 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

74. 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.

75. A 2-inch diameter fixture drain from a lavatory is connected to a 3-inch diameter horizontal branch. What is the minimum required horizontal distance from the trap weir to the vent connection, unless the fixture drain is increased one pipe size for its entire length?

- A. 12 feet
- B. 8 feet
- C. 5 feet
- D. 10 feet

- 76.** 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
- 77.** 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?
- A. An interceptor is not required if the facility is connected to an approved oil/water separator.
 - B. A sand interceptor is required, but an oil interceptor is optional.
 - C. An interceptor is always required for a motor vehicle washing facility.
 - D. An interceptor is only required if the facility washes more than 10 vehicles per day.
- 78.** A 2-inch diameter copper water pipe passes through a 2x4 wood stud wall. According to CPC Section 312.0, what is the minimum required diameter of the sleeve, unless the pipe is protected by other means?
- A. Sleeve must be at least 4 inches in diameter.
 - B. Sleeve must be at least 3 inches in diameter.
 - C. Sleeve must be at least 2 pipe sizes greater.
 - D. No sleeve is required for a wood stud wall.
- 79.** A temperature and pressure relief valve is installed on a storage water heater. What is the maximum allowable pressure setting for this valve?
- A. 125 psi
 - B. 175 psi
 - C. 150 psi
 - D. 200 psi
- 80.** A gas water heater is being installed in a residential garage. According to the 2022 CPC, what is the minimum height above the floor at which the ignition source of the appliance must be located, unless the appliance is listed for installation at floor level?
- A. 12 inches
 - B. 24 inches
 - C. 18 inches
 - D. 36 inches
- 81.** A commercial food establishment is installing a new water heater. According to the 2022 CPC, what is required for the water supply to emergency eyewash and shower equipment?
- A. Potable water at any temperature
 - B. Cold water only
 - C. Hot water only
 - D. Tepid water
- 82.** 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

- 83.** What is the minimum required horizontal distance between a vent terminal and an operable window, door, or air intake, unless the vent terminal is at least 3 feet above the opening?
- A. 12 feet
 - B. 10 feet
 - C. 3 feet
 - D. 5 feet
- 84.** What is the maximum gallons per flush (GPF) allowed for a urinal installed in a California commercial building under current water efficiency standards?
- A. 0.125 GPF
 - B. 1.28 GPF
 - C. 1.0 GPF
 - D. 0.5 GPF
- 85.** A secondary roof drainage system is installed using scuppers. According to the 2022 CPC, where must the secondary system discharge?
- A. It must connect to the primary storm drain inside the building.
 - B. It must discharge independently, except when the building has an automatic fire sprinkler system.
 - C. It must discharge to a drywell on the property, regardless of other systems.
 - D. It must always discharge independently to an approved location.
- 86.** 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
- 87.** 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.
- 88.** A water heater is installed in a residential garage. A pan is installed under the water heater. What is the minimum required diameter for the pan drain pipe?
- A. 1/2 inch
 - B. 1-1/4 inch
 - C. 3/4 inch
 - D. 1 inch
- 89.** 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

- 90.** 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
- 91.** 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
- 92.** A 4-inch diameter soil stack extends through a roof. What is the minimum required height above the roof for the vent terminal, provided that the roof is used for other than service and assembly purposes?
- A. 12 inches
 - B. 6 inches
 - C. 10 feet
 - D. 7 feet
- 93.** A 2-inch diameter individual vent is installed for a floor drain. What is the maximum allowed length of this vent from the trap weir to the vent terminal, if it has no offsets and serves only that fixture?
- A. 150 feet
 - B. 50 feet
 - C. 100 feet
 - D. 200 feet
- 94.** 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
- 95.** 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.
- 96.** 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?
- A. 4
 - B. 2
 - C. 1
 - D. 3

- 97.** 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
- 98.** An engineer is calculating the required size for a vent serving a single Category I water heater with an input of 125,000 Btu/h. The vent is Type B double-wall and has a total height of 20 feet. Using the appropriate table, what is the minimum vent diameter required?
- A. 4 inches
 - B. 6 inches
 - C. 5 inches
 - D. 7 inches
- 99.** 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
- 100.** An unlisted water heater is being installed in a combustible-framed alcove. What is the minimum required clearance on all sides and rear, and what must be done to the floor?
- A. 12 inches on all sides and rear; the combustible floor must be protected in an approved manner.
 - B. Clearance per manufacturer's instructions; floor must be concrete.
 - C. 6 inches on all sides and rear; floor protection is not required.
 - D. 12 inches on the sides and rear, 18 inches in front; floor protection is not required.