



# Backflow Tester

Free Practice Test — 30 Real Exam-Style Questions

with full answer key & explanations

**Unlock the full bank of 746 questions  
+ unlimited timed mock exams + mistake book**

Practice on the web: <https://certs.theorypractice.app/backflow-tester>

\$2.99 / week · \$6.99 / month · cancel anytime

**What you unlock: all 746 questions • unlimited timed mock exams • mistake book • instant explanations**

**Also on iOS & Android — and watch the full Q&A walkthrough on [YouTube @CertsQuizPrep](#)**



**Unlock all 746 questions + timed mock exams**

→ <https://certs.theorypractice.app/backflow-tester>

\$2.99/week or \$6.99/month · cancel anytime · scan to start



## Practice Questions

Try all 30 first, then check the answer key at the back.

Want the other 716+ questions & full timed mock exams? Unlock at  
<https://certs.theorypractice.app/backflow-tester>

**1. Which component in a Reduced Pressure Zone (RPZ) assembly maintains a differential pressure zone between the two check valves?**

- A. Relief valve
- B. Strainer
- C. Air gap
- D. Backpressure valve

**2. What is a cross-connection in a potable water system?**

- A. A pipe fitting that joins two different pipe sizes
- B. A valve that connects two separate water mains
- C. Any actual or potential link between a potable water supply and a source of contamination
- D. A meter installed to measure flow between two service lines

**3. Before beginning a field test on a double check valve assembly (DCVA), what must the tester do first?**

- A. Notify the water purveyor or their designee
- B. Close the downstream shut-off valve only
- C. Flush the test cocks open for 10 minutes
- D. Remove the check valve springs for inspection

Also on iOS & Android — and watch the full Q&A walkthrough on [YouTube](#)  
[@CertsQuizPrep](#)

**4. What is the standard unit of pressure used in plumbing and backflow prevention in the United States?**

- A. Pascals (Pa)
- B. Pounds per square inch (psi)
- C. Bar
- D. Atmospheres (atm)



Unlock all 746 questions + timed mock exams  
→ <https://certs.theorypractice.app/backflow-tester>

\$2.99/week or \$6.99/month · cancel anytime · scan to start



**5. Which federal agency establishes the primary drinking water standards that drive backflow prevention requirements in the United States?**

- A. Environmental Protection Agency (EPA)
- B. Occupational Safety and Health Administration (OSHA)
- C. Department of Housing and Urban Development (HUD)
- D. Federal Emergency Management Agency (FEMA)

**6. What is the primary purpose of test cocks on a backflow preventer?**

- A. To allow testers to measure differential pressure across check valves
- B. To drain the assembly for winterization
- C. To flush debris from the system
- D. To regulate incoming water pressure

Want the other 716+ questions & full timed mock exams? Unlock at

<https://certs.theorypractice.app/backflow-tester>

**7. OSHA classifies soil into four categories for excavation safety purposes. Which classification represents the least stable soil requiring the most stringent protective measures?**

- A. Type A — very stable cohesive soil with no fissures
- B. Stable rock — does not require a protective system
- C. Type B — moderately stable, some cracking
- D. Type C — granular, fissured, subject to vibration or water seepage

**8. Before attaching a differential pressure gauge to a double check valve assembly, the tester should first:**

- A. Close the downstream shutoff valve to isolate the assembly
- B. Open the test cocks fully to flush debris
- C. Record the static line pressure
- D. Verify the date on the gauge calibration sticker

**9. How many independently acting check valves does a standard Reduced Pressure Zone (RPZ) assembly contain?**

- A. One
- B. Three
- C. Two
- D. Four



Unlock all 746 questions + timed mock exams

→ <https://certs.theorypractice.app/backflow-tester>

\$2.99/week or \$6.99/month · cancel anytime · scan to start



Also on iOS & Android — and watch the full Q&A walkthrough on [YouTube](#)  
[@CertsQuizPrep](#)

**10. Which of the following is the BEST example of a direct cross-connection?**

- A. A garden hose submerged in a swimming pool while connected to a hose bib
- B. A backflow preventer installed on a fire line
- C. An air gap at the end of a water supply pipe above a sink
- D. A pressure vacuum breaker protecting an irrigation system

**11. Which of the following test kit components measures differential pressure across a check valve?**

- A. A pitot gauge
- B. A compound gauge
- C. A differential pressure gauge
- D. A velocity meter

**12. Static pressure in a water distribution system is measured when:**

- A. Water is flowing at maximum demand
- B. No water is flowing in the system
- C. The pump is running at rated speed
- D. A backflow preventer is open

Want the other 716+ questions & full timed mock exams? Unlock at  
<https://certs.theorypractice.app/backflow-tester>

**13. Who has primary enforcement authority for cross-connection control programs at the local level?**

- A. The EPA regional administrator
- B. The local water purveyor or water utility
- C. The state fire marshal
- D. The county building official

**14. A test cock on a double check valve assembly is found to be leaking past its seat. What is the correct repair action?**

- A. Apply pipe dope around the test cock body to seal the leak
- B. Tighten the test cock spindle until the leak stops, even if force is required
- C. Replace the test cock packing or the entire test cock
- D. Leave it and note it on the test report only



Unlock all 746 questions + timed mock exams  
→ <https://certs.theorypractice.app/backflow-tester>

\$2.99/week or \$6.99/month · cancel anytime · scan to start



**15. A backflow tester must work on a pressurized system but the only available valve has a gate that is corroded and cannot be fully closed. What is the LOTO-compliant response?**

- A. Obtain a blind flange or line stop to physically block flow, or escalate to management to defer the work until a proper isolation point exists; do not proceed with an ineffective isolation
- B. Close the valve as far as it will go and begin work; partial isolation is better than none
- C. Use a chain and lock on the valve handwheel to discourage others from opening it further
- D. Open the valve fully, as a fully open valve is considered the 'safe' position

Also on iOS & Android — and watch the full Q&A walkthrough on [YouTube](#)  
[@CertsQuizPrep](#)

**16. What is the primary purpose of bleeding air from differential pressure gauge hoses before taking readings?**

- A. To prevent freezing of the gauge internals
- B. To equalize hose lengths for accuracy
- C. To eliminate air pockets that cause false high readings
- D. To warm the gauge to ambient temperature

**17. What type of shutoff valves are typically required on either side of a testable backflow preventer assembly?**

- A. Gate valves
- B. Full-port ball valves or resilient-seated gate valves
- C. Globe valves
- D. Butterfly valves

**18. What is backflow in a plumbing system?**

- A. The normal forward flow of water from the supply to the point of use
- B. The undesirable reversal of flow of water or other substances into the distribution system
- C. A method of flushing dead-end mains to maintain water quality
- D. The flow of water from a high-pressure zone to a low-pressure zone within the same main

Want the other 716+ questions & full timed mock exams? Unlock at  
<https://certs.theorypractice.app/backflow-tester>



Unlock all 746 questions + timed mock exams

→ <https://certs.theorypractice.app/backflow-tester>

\$2.99/week or \$6.99/month · cancel anytime · scan to start



**19. How many test cocks does a standard reduced pressure principle assembly (RPBA) have?**

- A. Two
- B. Four
- C. Three
- D. Five

**20. Residual pressure is best defined as:**

- A. The pressure at the service connection before any use
- B. The pressure remaining in the system while water is flowing
- C. The pressure when the system is completely shut off
- D. The pressure at the highest point in a building

**21. The Uniform Plumbing Code (UPC) is published by which organization?**

- A. International Association of Plumbing and Mechanical Officials (IAPMO)
- B. American Society of Plumbing Engineers (ASPE)
- C. American Water Works Association (AWWA)
- D. American Society of Sanitary Engineering (ASSE)

Also on iOS & Android — and watch the full Q&A walkthrough on [YouTube](#)  
[@CertsQuizPrep](#)

**22. Which tool is most commonly used to operate a resilient-seated shutoff valve on a backflow preventer?**

- A. Pipe wrench
- B. Valve key or operating nut wrench
- C. Chain tong
- D. Strap wrench

**23. A new hire joins a backflow testing crew. Under OSHA's Hazard Communication Standard, the employer must provide hazcom training to the new employee:**

- A. At the time of initial assignment, before the employee works with or could be exposed to a hazardous chemical
- B. Within 30 days of hire
- C. Annually thereafter but not necessarily before initial exposure
- D. Only if the employee requests training



Unlock all 746 questions + timed mock exams

→ <https://certs.theorypractice.app/backflow-tester>

\$2.99/week or \$6.99/month · cancel anytime · scan to start



**24. A differential pressure gauge used for backflow testing must be calibrated at a minimum of how often?**

- A. Every 6 months
- B. Annually
- C. Every 2 years
- D. Every 5 years

Want the other 716+ questions & full timed mock exams? Unlock at  
<https://certs.theorypractice.app/backflow-tester>

**25. A Double Check Valve Assembly (DCVA) consists of two check valves, two shutoff valves, and which additional feature that distinguishes it from a simple dual-check?**

- A. An air gap
- B. A relief valve
- C. A vacuum breaker
- D. Test cocks between and outside the checks

**26. Backsiphonage occurs when:**

- A. Downstream pressure exceeds upstream supply pressure
- B. A pump increases pressure in a downstream system above supply pressure
- C. A backflow preventer fails in the closed position
- D. A negative or sub-atmospheric pressure develops in the supply piping

**27. Before attaching test hoses to the test cocks on a backflow preventer, the tester should:**

- A. Flush each test cock briefly to clear debris
- B. Close the upstream shut-off valve completely
- C. Open the downstream shut-off valve fully
- D. Remove the relief valve cover

Also on iOS & Android — and watch the full Q&A walkthrough on [YouTube](#)  
[@CertsQuizPrep](#)

**28. To convert pressure in psi to feet of head, you multiply psi by:**

- A. 0.433
- B. 2.31
- C. 144
- D. 62.4



Unlock all 746 questions + timed mock exams  
→ <https://certs.theorypractice.app/backflow-tester>

\$2.99/week or \$6.99/month · cancel anytime · scan to start



**29. Under the International Plumbing Code, which degree of hazard requires a reduced pressure principle backflow preventer (RPZ) rather than a double check valve assembly?**

- A. Low hazard (non-health hazard)
- B. High hazard (health hazard)
- C. Aesthetic hazard only
- D. Any cross-connection regardless of hazard

**30. When replacing a check valve disc in a reduced pressure principle (RPZ) assembly, what must be verified after reassembly?**

- A. That the disc is installed with the spring facing downstream
- B. That all test cocks are in the open position
- C. That the assembly is vented to atmosphere
- D. That the assembly passes a full differential pressure test



**Unlock all 746 questions + timed mock exams**

→ <https://certs.theorypractice.app/backflow-tester>

\$2.99/week or \$6.99/month · cancel anytime · scan to start



## Answer Key & Explanations

You just practised 30 of 746. Unlock every question + timed mocks at  
<https://certs.theorypractice.app/backflow-tester>

### 1. A — Relief valve

The relief valve in an RPZ assembly vents to atmosphere whenever the differential pressure between the two check valves drops below 2 psi, maintaining a reduced pressure zone. This is the defining characteristic of the RPZ assembly.

### 2. C — Any actual or potential link between a potable water supply and a source of contamination

A cross-connection is any physical link or arrangement between a potable water supply and any other system containing non-potable water, chemicals, or other substances. It creates a pathway for contamination to enter the drinking water supply.

### 3. A — Notify the water purveyor or their designee

The water purveyor must be notified before any field test begins so that service interruptions and water quality issues can be managed. This is a regulatory requirement in most jurisdictions.

### 4. B — Pounds per square inch (psi)

In U.S. plumbing and backflow prevention, pressure is expressed in pounds per square inch (psi). While other units exist internationally, psi is the standard for domestic codes and equipment ratings.

### 5. A — Environmental Protection Agency (EPA)

The EPA establishes primary and secondary drinking water standards under the Safe Drinking Water Act (SDWA), which are the foundation for cross-connection control and backflow prevention programs nationwide.

### 6. A — To allow testers to measure differential pressure across check valves

Test cocks provide access points for differential pressure gauges so testers can measure pressure across each check valve and the relief valve. They are not designed for draining, flushing, or pressure regulation.

### 7. D — Type C — granular, fissured, subject to vibration or water seepage

Type C is the least stable OSHA soil classification. It includes granular soils (gravel, sand), fissured cohesive soils, soils subject to water seepage, and previously disturbed soils. Type C requires the most conservative protective measures, such as a maximum 1½H:1V slope ratio.

### 8. A — Close the downstream shutoff valve to isolate the assembly

The downstream shutoff valve must be closed first to stop flow through the assembly so that meaningful pressure readings can be obtained during testing. Testing under flowing conditions produces inaccurate results.

### 9. C — Two

An RPZ assembly contains two independently acting, spring-loaded check valves in series. The space between them is the reduced pressure zone monitored by the relief valve.

### 10. A — A garden hose submerged in a swimming pool while connected to a hose bib

A garden hose submerged in a pool while still attached to a hose bib is a classic direct cross-connection: the



Unlock all 746 questions + timed mock exams

→ <https://certs.theorypractice.app/backflow-tester>

\$2.99/week or \$6.99/month · cancel anytime · scan to start

Unofficial study material · not affiliated with any certifying body



potable supply is physically linked to the pool water, which may contain algaecides and other contaminants.

**11. C — A differential pressure gauge**

A differential pressure gauge measures the pressure difference between two points, making it essential for evaluating check valve performance during backflow testing.

**12. B — No water is flowing in the system**

Static pressure is the pressure present in a closed system when there is no flow. It represents the baseline pressure before any demand is placed on the system.

**13. B — The local water purveyor or water utility**

The local water purveyor (utility) is responsible for enforcing cross-connection control programs within its service area. The utility has the authority to require backflow prevention assemblies as a condition of water service.

**14. C — Replace the test cock packing or the entire test cock**

A leaking test cock seat indicates worn packing or a damaged seat; the correct fix is to replace the packing or replace the test cock. Applying pipe dope or forcing the spindle can damage the body and does not address the root cause.

**15. A — Obtain a blind flange or line stop to physically block flow, or escalate to management to defer the work until a proper isolation point exists; do not proceed with an ineffective isolation**

A valve that cannot be fully closed does not provide reliable energy isolation. OSHA 1910.147 requires that energy be reliably controlled before work begins. Acceptable solutions include physical pipe blocking (blind flange, line stop) or postponing work. Partial closure does not satisfy LOTO requirements and places the worker at risk.

**16. C — To eliminate air pockets that cause false high readings**

Air trapped in the hoses compresses under pressure and causes the gauge needle to read higher than the actual differential pressure. Bleeding the hoses ensures the system is fully liquid-filled for accurate readings.

**17. B — Full-port ball valves or resilient-seated gate valves**

Full-port ball valves or resilient-seated gate valves are required as shutoff valves flanking testable backflow preventers because they allow full, unobstructed flow and can be fully closed for isolation and testing.

**18. B — The undesirable reversal of flow of water or other substances into the distribution system**

Backflow is the unwanted reversal of water or other substances into the potable water distribution system, which can introduce contaminants if a cross-connection exists.

**19. B — Four**

A standard RPBA has four test cocks—one upstream of check valve #1, one between the two check valves, one in the relief valve zone, and one downstream—allowing testers to isolate pressures at each critical point.

**20. B — The pressure remaining in the system while water is flowing**

Residual pressure is the pressure measured at a specific point in the distribution system while water is being used (flowing). It is always lower than static pressure due to friction and velocity losses.

**21. A — International Association of Plumbing and Mechanical Officials (IAPMO)**

The Uniform Plumbing Code is published by IAPMO and is adopted primarily in western states. It contains specific requirements for cross-connection control and backflow prevention devices.



**Unlock all 746 questions + timed mock exams**

→ <https://certs.theorypractice.app/backflow-tester>

\$2.99/week or \$6.99/month · cancel anytime · scan to start



**22. B — Valve key or operating nut wrench**

Resilient-seated shutoff (ball or gate) valves on backflow assemblies typically have an operating nut or handle requiring a valve key or matching wrench. A pipe wrench can damage the valve body.

**23. A — At the time of initial assignment, before the employee works with or could be exposed to a hazardous chemical**

OSHA 1910.1200(h) requires HazCom training at the time of initial assignment and whenever a new hazardous chemical is introduced to the work area. Waiting 30 days or training only on request does not satisfy the requirement that employees understand hazards before they encounter them.

**24. B — Annually**

Most state and AWWA guidelines require differential pressure gauges used in backflow testing to be calibrated at least once per year to ensure reading accuracy within acceptable tolerances.

**25. D — Test cocks between and outside the checks**

A DCVA includes test cocks (typically four) that allow field testing of each check valve independently, unlike a simple dual-check that has no test ports. This testability is required for cross-connection control programs.

**26. D — A negative or sub-atmospheric pressure develops in the supply piping**

Backsiphonage is caused by a negative pressure (vacuum) in the supply line, which can siphon contaminants backward into the potable water system, similar to sucking liquid through a straw.

**27. A — Flush each test cock briefly to clear debris**

Flushing test cocks before attaching hoses clears sediment or debris that could clog fittings or give inaccurate readings during the test.

**28. B — 2.31**

To convert psi to feet of head, multiply by 2.31 (since 1 psi = 2.31 feet of water). Conversely, to convert feet of head to psi, multiply by 0.433.

**29. B — High hazard (health hazard)**

A high hazard (health hazard) cross-connection requires protection by an RPZ assembly because the potential contamination could be injurious to health. Low-hazard applications may use a double check valve assembly.

**30. D — That the assembly passes a full differential pressure test**

After any internal repair on an RPZ, a complete differential pressure test must be performed and the assembly must meet its opening and closing pressure specifications before being returned to service.



**Unlock all 746 questions + timed mock exams**

→ <https://certs.theorypractice.app/backflow-tester>

\$2.99/week or \$6.99/month · cancel anytime · scan to start

Unofficial study material · not affiliated with any certifying body



# Ready to pass?

Unlock the full Backflow Tester bank, every explanation, and unlimited timed mock exams.

**Scan to start practising**

<https://certs.theorypractice.app/backflow-tester>

Watch the full video walkthrough on YouTube @CertsQuizPrep



**Unlock all 746 questions + timed mock exams**

→ <https://certs.theorypractice.app/backflow-tester>

\$2.99/week or \$6.99/month · cancel anytime · scan to start