

## A NON- Illustrated Course

1. **Download Quizzes – Open – Print**

2. **Download and Print** provided code material.

3. **Study code material**, circle correct answers on the printed quizzes.

4. **Login** to your account using your ID and password.

5. **Status** page for your account appears. **Click on link : “Click here to start this course.”**



6. Click on the course pages to advance to the first quiz.

7. Refer to your printed quizzes to find the correct answers to each of the on-line quiz questions.

You will notice that the questions are exactly the same as your printed ones.

This is just like an open book test.

### QUIZ 1

Question 1: An airbreak is:  
a device used to stop the motion of a pipe threading machine  
a device used to stop the motion on a 1 ton or larger service vehicle  
a break in the line for a DWV system  
a physical separation which may be a low inlet into the indirect waste receptor from the fixture

Question 2: The correct reference for the above question is:  
201.0  
203.0  
203.0  
204.0

Question 3: An Area Drain is:  
a minimum of 2” ID  
must be made of ABS  
must be made of galvanized steel and be recessed ¼” below grade  
is a receptor designed to collect surface or storm water from an open area.

Question 4: The correct reference for the above question is:  
201.0  
202.0  
203.0  
204.0

Question 5: An Aspirator is  
the handheld faucet on a flexible supply line, located on the basin of a sink

a device on the outlet of a water faucet to entrain air into potable water  
a device supplied with water under positive pressure which passes through an integral orifice causing a vacuum  
a positive displacement pump apparatus whose single purpose is to inject chemicals for swimming pools

Question 6: The correct reference for the above question is:  
201.0  
202.0  
203.0  
204.0

Question 7: Backflow means:  
water running “uphill”  
the flow of water into the distributing pipes of a potable supply of water from any sources other than its intended source  
sewer water backing up into a basement during high runoff conditions  
hot water from a water tank heating up cold water lines

Question 8: The correct reference for the above question is:  
201.0  
202.0  
203.0  
204.0

Question 9: A battery of fixtures is:  
Any group of two (2) or more similar, adjacent fixtures which discharge into a common horizontal waste or soil branch.  
Any group of three (3) or more similar, adjacent fixtures which discharge into a common horizontal waste or soil branch.

Any group of four (4) or more similar, adjacent fixtures which discharge into a common horizontal waste or soil branch.  
Any group of five (5) or more similar, adjacent fixtures which discharge into a common horizontal waste or soil branch.

Question 10: The correct reference for the above question is:  
201.0  
202.0  
203.0  
204.0

Question 11: An individual vent is installed to vent a fixture trap and:  
connects to the vent system above the fixture served or terminates in the open air.  
connects to the vent system below the fixture served or terminates in the open air.  
connects to the vent system at the same level of the fixture served or terminates in the open air.  
all of the above

Question 12: The correct reference for the above question is:  
210.0  
209.0  
208.0  
205.3  
211.0

Question 13: What is clear water waste?  
waste water from a drinking fountain  
sewer that is clear in color  
condensate from a boiler  
hot water rinse water from a commercial dishwasher  
all of the above

Question 14: The correct reference for the above question is:  
201.0  
202.0  
203.0  
204.0  
205.0

Question 15: What is a conductor?  
a pipe on the outside of a building which conveys storm water from the roof to a storm water drain  
a pipe on the inside of a building which conveys storm water from the roof to a storm water drain  
a pipe on the inside of a building which conveys waste water from the roof to a storm water drain  
a pipe on the outside of a building which conveys waste water from the roof to a storm water drain  
a pipe on the inside of a building which conveys waste water from the roof to a waste water drain

Question 16: The correct reference for the above question is:  
201.0  
202.0  
203.0  
204.0  
205.0

Question 17: A Durham system  
is a design method for rainwater drains from buildings  
uses threaded piping with recessed fittings  
is a method of heat recovery for boiler blow down  
is not allowed by current code practice

Question 18: The correct reference for the above question is:  
202.0  
206.0  
204.0  
205.0  
203.0

Question 19: An Effective Opening could best be described as:

the minimum cross sectional diameter of a circle of the water discharge.  
the average cross sectional diameter of a circle of the water discharge  
the maximum cross sectional diameter of a circle of the water discharge  
1.5 times the minimum cross sectional diameter of a circle of the water discharge

Question 20: The correct reference for the above question is:  
207.0  
209.1  
207.1  
205.3

Question 21: Flammable Vapor or Fumes:  
is when the flammable constituents in air exceed 10 % of the LFL.  
is when the flammable constituents in air exceed 10 % of the LFL  
is when the flammable constituents in air exceed 25 % of the LFL  
is when the flammable constituents in air is equal to 100 % of the LFL.

Question 22: The correct reference for the above question is:  
207.0  
209.1  
208.0  
205.3

Question 23: A grade is  
the slope of a pipe in reference to a horizontal line  
the fall of a pipe in reference to a horizontal line  
measured in a fraction of an inch per foot  
measured in a percentage of slope per foot  
all of the above

Question 24: The correct reference for the above question is  
207.0 209.0 208.0 205.3 215.0

### Quiz 2

Question 1: A horizontal pipe must be installed at an angle less than \_\_\_\_\_ degrees from the horizontal.  
12 ½  
22 ½  
33 1/3  
45  
66 2/3

Question 2: The correct reference for the above question is:  
210.0  
209.0  
208.0  
205.3  
215.0

Question 3: Which of the following conditions does the term "insanitary" NOT apply to:  
a trap that does not maintain its seal  
a toilet which does not have enough water to adequately flush the bowl  
a condition when waste water could enter a potable water supply system  
a defective fixture  
NONE of the above, all are insanitary conditions

Question 4: The correct reference for the above question is:  
207.0  
209.1  
211.0  
205.3

Question 5: Invert means  
the highest portion of the outside of a horizontal pipe  
the lowest portion of the outside of a horizontal pipe  
the average mean distance of the outside of a horizontal pipe

the lowest portion of the inside of a horizontal pipe  
none of the above

Question 6: The correct reference for the above question is:  
207.0  
209.1  
211.0  
205.3

Question 7: A leader in plumber terms means:  
the end of a sewer snake that is used to break up clogs in waste lines  
the main waste vent that fixture side vents connect  
the water supply line that enters the building  
the drain pipe for conveying storm water from a roof  
none of the above

Question 8: The correct reference for the above question is:  
214.0  
209.1  
211.0  
205.3

Question 9: A macerating toilet system  
connects to the toilet  
connects to other plumbing fixtures  
grinds and pumps the waste  
all of the above except 1  
all of the above

Question 10: The correct reference for the above question is:  
214.0 209.1 211.0 215.0

Question 11: An offset is  
a pipe that is at 45 degrees from an other pipe  
a pipe that is at 90 degrees from an other pipe  
a pipe that out of line but parallel with an other pipe  
a pipe that is out of line and not parallel with an other pipe.  
none of the above

Question 12: The correct reference for the above question is:  
217.0 209.1 211.0 215.0

Question 13: PEX is  
cross-linked polyethylene  
Plastic External usage  
Polyvinyl cross-linked material  
Poly-propylene cross linked material  
none of the above

Question 14: The correct reference for the above question is:  
216.0  
218.0  
211.0  
215.0

Question 15: A riser is:  
a water supply pipe which extends vertically one (1) full story or more to convey water to branches or fixtures.  
a vent system which extends vertically one (1) full story or more for venting of the waste system  
a waste system conductor which is located vertically one (1) full story or more above the main waste conductor  
all of the above  
none of the above

Question 16: The correct reference for the above question is:  
216.0  
220.0  
211.0  
215.0  
205.0

Question 17: A sump

is an approved tank which receives liquid waste, is located above the normal grade and must be emptied by mechanical means  
is an approved tank which receives liquid waste, is located below the normal grade and must be emptied by mechanical means.  
is any tank which receives liquid waste, is located below the normal grade and must be emptied by mechanical means  
is an approved tank which receives liquid waste, is located below the normal grade and must not be emptied by mechanical means  
None of the above

Question 18: The correct reference for the above question is:  
216.0  
220.0  
221.0  
215.0  
205.0

Question 19: A trap primer  
is the solvent used to clean ABS pipe before final gluing  
the solvent used on PEX prior to assembly to a trap  
is the solvent used to clean CPCV prior to final gluing as a trap a device and system of piping that maintains a water seal in a remote trap  
none of the above

Question 20: The correct reference for the above question is:  
216.0  
220.0  
221.0  
215.0  
222.0

Question 21: A Vertical Pipe  
is a pipe that is not more than 90 degrees from a vertical position  
is a pipe that is not more than 66 2/3 degrees from a vertical position  
is a pipe that is not more than 60 degrees from a vertical position  
is a pipe that is not more than 45 degrees from a vertical position  
is a pipe that is only in a vertical position.

Question 22: The correct reference for the above question is:  
224.0 220.0 211.0 215.0 205.0

Question 23: A waste pipe conveys  
only liquid waste  
liquid waste that may contain fecal matter  
only liquid waste containing fecal matter  
waste from a macerating toilet system  
storm water and building sewer waste

Question 24: The correct reference for the above question is:  
224.0 220.0 211.0 215.0 225.0

### Quiz 3

Question 1: On an installation, waste line was discovered to have a small crack. What action should the plumber take?  
remove the bad section and replace with new  
seal minor leak with epoxy  
braze crack shut  
weld crack shut  
do nothing until the crack starts to leak

Question 2: The correct reference for the above question is:  
310.1  
310.2  
311.2  
311.8

Question 3: The minimum sized cast iron pipe that can be threaded is:  
2 inch  
3 inch  
4 inch  
6 inch  
none, code does not allow threading

- Question 4: The correct reference for the above question is:  
 310.1  
 310.2  
 311.2  
 311.8  
 311.2
- Question 5: Trenching alongside of a building which is deeper than the footing shall be sloped at least the following angle.  
 12 ½ degrees  
 30 degrees  
 60 degrees  
 65 degrees  
 none of the above
- Question 6: The correct reference for the above question is:  
 313.1  
 313.2  
 313.3  
 313.4  
 313.5
- Question 7: A building sewer line must be installed at least \_\_\_\_\_ from the building.  
 ½ ft  
 1 ft.  
 16 inches  
 24 inches  
 no minimum distance
- Question 8: The correct reference for the above question is:  
 313.1  
 313.2  
 313.3  
 313.4  
 313.5
- Question 9: Piping penetrations through a floor must be:  
 a. sealed  
 b. fire-stopped  
 c. waterproofed  
 d. fire-stopped only if penetrating a fire resistant rated floor  
 a, b, and c
- Question 10: The correct reference for the above question is:  
 313.1 313.2 313.3 313.5 313.7
- Question 11: A cast iron vent pipe may be used as a structural support.  
 Yes  
 No
- Question 12: The correct reference for the above question is:  
 313.10.1  
 313.10.2  
 313.10.3  
 313.10.4
- Question 13: When rat-proofing a drain, a strainer plate must have an opening no larger than:  
 1/8 inch  
 ¼ inch  
 3/8 inch  
 ½ inch  
 5/8 inch
- Question 14: The correct reference for the above question is:  
 313.12.1  
 313.12.2  
 313.12.3  
 313.12.4
- Question 15: The minimum size of a hanger rod supporting 10" pipe is  
 3/8
- ½  
 5/8  
 any of the above  
 none of the above
- Question 16: The correct reference for the above question is:  
 314.1  
 314.5  
 314.6  
 314.7
- Question 17: The minimum distance between hanger supports when hanging 1" steel thread pipe for gas shall be:  
 4 ft.  
 8 ft.  
 10 ft.  
 12 ft.  
 16 ft.
- Question 18: The correct reference for the above question is:  
 314.1  
 314.5  
 314.6  
 314.7
- Question 19: When can a restaurant employees place food and drinks in a storage area which has soil or drain pipes located overhead.  
 a. NEVER  
 b. when the drain pipes have the least number of possible joints  
 c. when drains are equipped with integral seepage pans  
 d. piping is tested to 25 ft of water  
 e. b and c from above
- Question 20: The correct reference for the above question is:  
 316.1  
 317.2  
 318.0  
 319.4
- Quiz 4**
- Question 1: A new toilet in a residential application must need water consumption standards. The maximum amount of water per flush shall not exceed \_\_\_\_\_.  
 1.0 gal  
 1.6 gal  
 2.1 gal  
 3.5 gal  
 5.0 gal
- Question 2: The correct reference for the above question is:  
 401.1.3.1  
 402.3.1.2  
 403.0.1.0  
 404.03.1
- Question 3: A urinal shall not exceed \_\_\_\_\_ gallons per flush.  
 1.0  
 0.8  
 0.7  
 0.6  
 0.5
- Question 4: The correct reference for the above question is:  
 401.1.2.1  
 402.3.1.3  
 403.01.0  
 404.05.6
- Question 5: A urinal that operates on a continuous flow is permitted.  
 True  
 False

- Question 6: The correct reference for the above question is:  
 401.1.2.3  
 402.3.1.4  
 403.0.5.2  
 404.01.3  
 12 inches  
 15 inches  
 16 inches  
 18 inches  
 24 inches.
- Question 7: The maximum water flow permitted from a kitchen faucet is \_\_\_\_\_ gpm.  
 1.0  
 1.6  
 2.5  
 3.5  
 5.0
- Question 8: The correct reference for the above question is:  
 401.1  
 402.3.23  
 402.4  
 403.0  
 404.0
- Question 9: When is a strainer on a plumbing fixture NOT required?  
 urinal  
 residential sink  
 commercial sink  
 bathtub  
 shower
- Question 10: The correct reference for the above question is:  
 404.1  
 404.2  
 404.3  
 404.4
- Question 11: A dishwasher drain may be connected to the discharge side of a food waste disposal unit.  
 True  
 False
- Question 12: The correct reference for the above question is:  
 404.1  
 404.2  
 404.3  
 404.4
- Question 13: A drinking fountain shall not be installed \_\_\_\_\_.  
 in a public toilet room  
 in a shower room  
 in a gymnasium locker room  
 in a steam bath
- Question 14: The correct reference for the above question is:  
 405.1  
 405.2  
 405.3  
 405.4
- Question 15: Sheet metal restaurant sinks shall be a minimum gauge thickness of \_\_\_\_\_.  
 12  
 14  
 16  
 20  
 24
- Question 16: The correct reference for the above question is:  
 406.1  
 406.2  
 406.3  
 406.4
- Question 17: When installing a toilet, it should not be any closer than \_\_\_\_\_ from its center line to a side wall.
- Question 18: The correct reference for the above question is:  
 407.4  
 407.5  
 407.6  
 407.7
- Question 19: When installing a toilet, it should not be any closer than \_\_\_\_\_ from its center line to the center line of an adjacent toilet.  
 12 inches  
 16 inches  
 18 inches  
 24 inches  
 30 inches
- Question 20: The correct reference for the above question is:  
 407.4  
 407.5  
 407.6  
 407.7
- Question 21: The clear space in front of a toilet needs to be at least \_\_\_\_\_ inches.  
 12 inches      16 inches      18 inches      24 inches      30 inches
- Question 22: The correct reference for the above question is:  
 407.4  
 407.5  
 407.6  
 407.7
- Question 23: In a public restroom that has 1 water closet and 1 urinal, a floor drain must be installed.  
 True  
 False
- Question 24: The correct reference for the above question is:  
 408.0  
 409.5  
 410.6  
 411.2
- Question 25: A shower is to have a minimum interior area of at least \_\_\_\_\_ sq. inches.  
 900      1024      1200      1444      1556
- Question 26: The correct reference for the above question is:  
 408.0      409.5      410.6      411.7
- Question 27: The location of the shower valves and heads must be  
 on the side wall  
 can be adjusted prior to stepping into the shower spray  
 so that the shower head does not discharge at the entrance to the compartment  
 none of the above  
 all of the above
- Question 28: The correct reference for the above question is:  
 408.0  
 409.5  
 410.6  
 411.10
- Question 29: In a public restroom the maximum water temperature shall not exceed \_\_\_\_\_ degrees F.  
 110  
 115  
 120

125  
140

Question 30: The correct reference for the above question is:  
413.0  
413.1  
415.1  
417.2

Question 31: When installing a sink that has 2 handles to control the water flow, the \_\_\_\_\_ side shall be hot water and the \_\_\_\_\_ side shall be cold water. (when facing the sink)  
left / right  
right / left  
either side  
not addressed in the code

Question 32: The correct reference for the above question is:  
413.1  
414.0  
415.0  
416.0

Question 33: The maximum temperature of hot water discharging into a bathtub filler shall be \_\_\_\_\_ degrees F.  
110  
115  
120  
125  
140

Question 34: The correct reference for the above question is:  
420.0  
414.5  
422.0  
423.0

#### Quiz 5

Question 1: A hot water tank is to be installed in a 3 bedroom, 3 bath home. The first hour rating of the tank shall be at least \_\_\_\_\_ gallons.  
42  
54  
67  
80

Question 2: The correct reference for the above question is:  
501.0  
502.1  
502.5  
502.12

Question 3: A hot water tank is to be installed in a 3 bedroom, 1.5 bath home. The first hour rating of the tank shall be at least \_\_\_\_\_ gallons.  
42  
54  
67  
80

Question 4: The correct reference for the above question is:  
501.0  
502.1  
502.5  
502.12

Question 5: A hot water tank is to be installed in a 4 bedroom, 2.5 bath home. The first hour rating of the tank shall be at least \_\_\_\_\_ gallons.  
42  
54  
67  
80

Question 6: The correct reference for the above question is:

501.0  
502.1  
502.5  
502.12

Question 7: A fuel burning water heater installed in a closet of a bedroom or sleeping room is not allowed unless all of the following is true EXCEPT:  
it is a direct vent type  
the closet door is gasketed  
the closet door has a self closing device  
the closet door has a bolting lock

Question 8: The correct reference for the above question is:  
505.1  
505.3  
505.4  
506.1

Question 9: A shut-off valve may be placed between the water tank and pressure relief valve  
True  
False

Question 10: The correct reference for the above question is:  
505.1  
505.3  
505.4  
505.6

Question 11: A shut-off valve may be placed between the pressure relief valve and discharge piping to atmosphere.  
True  
False

Question 12: The correct reference for the above question is:  
505.1 505.3 505.4 505.6

Question 13: In seismic areas C-F, a water heater must be strapped to resist horizontal displacement.  
 $\frac{1}{4}$ ,  $\frac{1}{4}$ , 4  
 $\frac{1}{4}$ ,  $\frac{1}{4}$ , 6  
 $\frac{1}{3}$ ,  $\frac{1}{3}$ , 4  
 $\frac{1}{3}$ ,  $\frac{1}{3}$ , 6

Question 14: The correct reference for the above question is:  
508.1  
508.2  
508.3  
508.4

Question 15: A water heater installed in an attic shall have a waterproof drain with a minimum \_\_\_\_\_ inch drain line.  
 $\frac{1}{2}$   
 $\frac{3}{4}$   
1  
1  $\frac{1}{2}$   
not addressed in the code since water heaters in attics are not allowed

Question 16: The correct reference for the above question is:  
508.1  
508.2  
508.3  
508.4

Question 17: The discharge from a relief valve may empty into a water heater pan.  
True  
False

Question 18: The correct reference for the above question is:  
508.1  
508.2  
508.3  
508.4

508.5

multiple-use drain  
fixture drain

Question 19: When is a non-direct vent water heater allowed in a facility that routinely uses flammable aerosol sprays?  
Never—no exceptions  
Always—no restrictions  
when the tank is 40 gallons or less  
when the tank has a flame guard burner  
none of the above

Question 7: When the liquid rises above the flood level rim, the fixture is known as:  
overloaded  
overflowed  
flooded  
capacity excess

Question 20: The correct reference for the above question is:  
508.10  
508.2  
508.3  
508.4  
508.5

Question 8: A valve located at the bottom of the tank for the purpose of flushing water closets is known as:  
basin valve  
tank valve  
flush valve  
waste valve

Question 21: When installing a gas water heater in a residential garage, the tank must be at least \_\_\_\_\_ inches above the floor unless \_\_\_\_\_.  
16, no exceptions  
18, no exceptions  
16, listed as flammable vapor ignition resistant  
18, listed as flammable vapor ignition resistant  
24, listed as flammable vapor ignition resistant

Question 9: Two or more showers in a common area are known as a:  
gang shower  
common shower  
community shower  
combination shower

Question 22: The correct reference for the above question is:  
508.11  
508.12  
508.13  
508.14  
508.20

Question 10: The falloff a line of pipe in reference to a horizontal plane is known as:  
grade  
drop  
decline  
degrees

**Quiz 6**

Question 1: The length along the center line of a pipe and fittings is known as the:  
total length  
developed length  
overall length  
usable length

Question 11: A device designed to retain grease from one to a maximum of four fixtures is known as:  
holding tank  
grease tank  
interceptor tank  
catch tank

Question 2: The rainleader from the roof to the building storm drain located outside of the building is known as:  
elbow  
leave port  
leaf port  
downspout

Question 12: The lowest portion of the inside of a horizontal pipe is known as the:  
bottom  
BDC  
invert  
convert

Question 3: A soil or waste system in which all piping is threaded pipe or tubing using recessed drainage fittings to correspond to the types of piping is known as a(n):  
UPC drainage system  
IPC drainage system  
ABS drainage system  
Durham system

Question 13: A joint obtained by joining 2 metal parts with metallic mixtures or alloys which melt at a temperature up to and including 840 degrees F is known as:  
sweat joint                      soldered joint                      brazed joint  
welded joint

Question 4: The minimum cross-sectional area at the point of water supply discharge measured or expressed in term of diameter of a circle is known as the:  
actual opening  
effective opening  
useful opening  
nominal opening

Question 14: An exterior vertical drainage pipe for conveying storm water from roof or gutter drains is known as:  
a leader                      a follower                      a conveyer                      a conduit

Question 5: A plumbing system that has been installed prior to the effective date of this code is known as:  
existing work  
prior work  
grand fathered work  
effective work

Question 15: A “permissive term” would be one of the following:  
shall                      must                      required                      may

Question 6: A drain from the trap of a fixture to the junction of that drain with any other drainpipe is known as a:  
combination drain  
continuous drain

Question 16: A combination of elbows or bends in a line of piping which brings one section of the pipe out of line but into a line parallel with the other section is known as:  
inset                      offset                      reset                      side set

Question 17: Water that is satisfactory for drinking, culinary and domestic purposes and that meeting the requirements of the Health Authority have jurisdiction is known as:  
potable water                      drinking water                      sanitary water  
usable water

Question 18: A mixing valve that senses incoming hot and cold water pressures and compensates for fluctuations in either to stabilize outlet temperatures is known as:

mixing valve  
pressure balancing valve  
water valve  
anti-scalding valve

Question 19: A vent, the primary function of which is to provide circulation of air between drainage and vent systems or to act as an auxiliary vent on a specially designed system is known as:

auxiliary vent  
overpressure vent  
circulating vent  
relief vent

Question 20: When used for sizing water piping, it is the furthest outlet dimension, measuring from the meter. This is known as the:

extreme outlet  
end point outlet  
remote outlet  
far point outlet

Question 21: A water supply pipe that extends vertically one full story or more to convey water to branches or fixtures is known as:

a header  
the main supply  
a riser  
a footer

Question 22: A lined excavation in the ground that receives the discharge of a septic tank so designed as to permit the effluent from the septic tank to seep through its bottom and sides is known as a:

septic drain  
septic pit  
cesspool  
drainage pit

Question 23: Any liquid waste containing animal or vegetable matter in suspension or that may include liquids containing chemicals in solution is known as:

sewage  
black water  
white water  
gray water

Question 24: What word indicates a recommendation or that which is advised but not required?

shall  
must  
required  
should

Question 25: A vent which also serves as a drain is known as a:

dry vent  
wet vent  
combination vent  
dual vent