

PRACTICE EXAM 17 QUESTION (1 -50)

1. Workers are placing vertical reinforcing steel (rebar) that protrudes upward where employees could fall onto it. Under OSHA, what must be done to protect against impalement?

- A. Bend each exposed bar over at a ninety-degree angle near the top
- B. Paint the exposed ends of the rebar with bright safety orange paint
- C. Post a warning sign within ten feet of the exposed reinforcing steel
- D. Guard the exposed ends with protective caps or troughs rated for the hazard

2. A room has 1,280 square feet of wall and ceiling to cover with 4-foot by 8-foot drywall sheets (32 square feet each). How many sheets are needed before waste?

- A. 32 sheets of drywall
- B. 40 sheets of drywall
- C. 50 sheets of drywall
- D. 64 sheets of drywall

3. Georgia maintains a fund that may compensate certain homeowners for losses caused by a licensed residential contractor's misconduct. This fund is known as what?

- A. The Residential Contractor Recovery Fund administered by the state
- B. The General Contractor Surety Pool held by the licensing board
- C. The Homeowner Warranty Reserve maintained by each county
- D. The Construction Indemnity Trust funded by building permit fees

4. When operating a crane near energized overhead power lines rated up to 50 kV, OSHA generally requires a minimum clearance of what distance between the equipment and the lines?

- A. 4 feet of clearance from the power lines
- B. 6 feet of clearance from the power lines
- C. 10 feet of clearance from the power lines
- D. 20 feet of clearance from the power lines

5. Under many standard construction contracts (such as AIA forms), the contractor's general obligation to correct defective work discovered after substantial completion typically runs for what period?

- A. 6 months from the date of substantial completion of the work
- B. 1 year from the date of substantial completion of the work
- C. 5 years from the date of substantial completion of the work
- D. 10 years from the date of substantial completion of the work

6. Under the IBC, the maximum exit access travel distance to an exit in a sprinklered business (Group B) occupancy is generally which of the following?

- A. 300 feet of travel distance to an exit
- B. 150 feet of travel distance to an exit
- C. 75 feet of travel distance to an exit
- D. 500 feet of travel distance to an exit

7. A small repair requires 6 cubic feet of concrete. If each bag of premix yields 0.5 cubic feet, how many bags are needed?

- A. 3 bags of premix concrete
- B. 6 bags of premix concrete
- C. 9 bags of premix concrete
- D. 12 bags of premix concrete

8. When storing compressed gas cylinders such as oxygen and acetylene on a job site, OSHA requires which of the following?

- A. Cylinders may be stored lying flat as long as the protective caps are removed
- B. Fuel gas and oxygen cylinders may be stored together without any barrier
- C. Cylinders secured upright with oxygen separated from fuel gas by distance or a barrier
- D. Cylinders stored within five feet of any active welding operation for convenience

9. In Georgia, the Residential-Basic Contractor classification generally limits the licensee to building or improving which type of structure?

- A. Detached one-family and two-family dwellings and their accessory structures
- B. Commercial structures of unlimited size and any number of stories
- C. High-rise multifamily buildings exceeding four stories in height
- D. Industrial warehouses and manufacturing plants of any square footage

10. In a construction contract, an "allowance" is best described as which of the following?

- A. The percentage of profit the contractor adds to its total direct costs
- B. The retainage the owner withholds from each progress payment made
- C. A budgeted sum included for items not yet fully selected or specified
- D. The contingency the contractor keeps to cover its own estimating errors

11. OSHA requires a fire extinguisher to be located so that the maximum travel distance for an employee to reach one for Class A fire hazards does not exceed what?

- A. 50 feet of travel distance to reach an extinguisher
- B. 75 feet of travel distance to reach an extinguisher
- C. 100 feet of travel distance to reach an extinguisher

D. 25 feet of travel distance to reach an extinguisher

12. A dump truck holds 12 loose cubic yards. A job requires hauling away 180 loose cubic yards of soil. How many truckloads are required?

A. 12 truckloads are required

B. 13 truckloads are required

C. 14 truckloads are required

D. 15 truckloads are required

13. Georgia general and residential contractor licensees must complete continuing education to renew. The requirement is generally how many hours per renewal cycle?

A. 2 hours of continuing education per renewal cycle

B. 4 hours of continuing education per renewal cycle

C. 6 hours of continuing education per renewal cycle

D. 12 hours of continuing education per renewal cycle

14. Under OSHA, before demolition of a structure begins, the standard requires which of the following to be performed?

A. An engineering survey by a competent person to assess the structure's condition

B. A full asbestos abatement of the entire structure regardless of materials present

C. Notification of every adjacent property owner at least sixty days in advance

D. Removal of all underground utilities by the local utility company first

15. Under the IBC, open guards must be designed so that a sphere of what diameter cannot pass through the openings, for typical occupancies?

A. A 6-inch sphere cannot pass through the openings

- B. A 4-inch sphere cannot pass through the openings
- C. A 9-inch sphere cannot pass through the openings
- D. A 12-inch sphere cannot pass through the openings

16. A contractor needs 500 linear feet of #4 reinforcing bar, which weighs about 0.668 pounds per linear foot. Approximately how many pounds of rebar is this?

- A. About 134 pounds of rebar
- B. About 668 pounds of rebar
- C. About 250 pounds of rebar
- D. About 334 pounds of rebar

17. Under Georgia's prompt payment provisions, after a general contractor receives payment from the owner, the contractor must generally pay its subcontractors their share within what period?

- A. 10 days after receiving payment from the owner
- B. 30 days after receiving payment from the owner
- C. 60 days after receiving payment from the owner
- D. 90 days after receiving payment from the owner

18. When welding or cutting (hot work) is performed where combustible materials cannot be relocated, OSHA and standard practice require which of the following?

- A. The work must be stopped until all combustibles are removed from the building
- B. The operation may proceed if a fire extinguisher is located within fifty feet
- C. A fire watch with extinguishing equipment present during and after the work
- D. Sprinklers must be shut off near the work to prevent accidental discharge

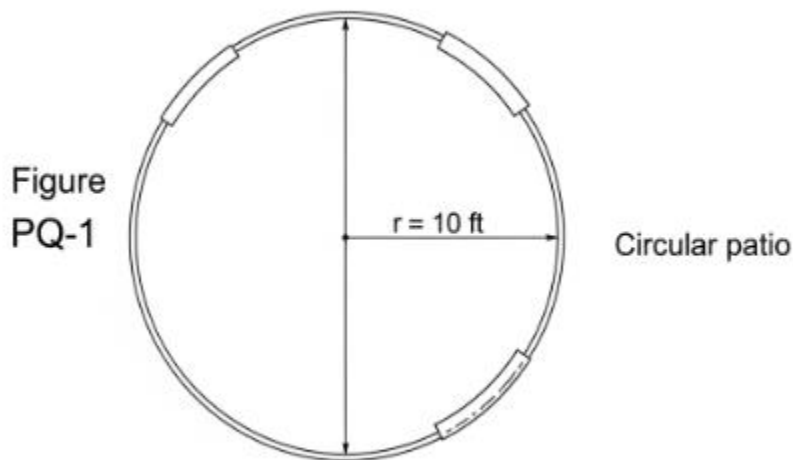
19. Under a "design-build" project delivery method, which of the following is true?

- A. The owner holds separate contracts with the designer and the contractor
- B. The contractor only builds from drawings prepared by the owner's architect
- C. The low bidder is always selected through competitive sealed public bidding
- D. A single entity is responsible for both the design and the construction

20. Under accessibility requirements, a parking lot with 100 total spaces must provide a minimum of how many accessible parking spaces?

- A. 2 accessible parking spaces minimum
- B. 4 accessible parking spaces minimum
- C. 6 accessible parking spaces minimum
- D. 10 accessible parking spaces minimum

21. A contractor must pour a circular concrete patio with a radius of 10 feet, as shown. What is the area of the patio? (Use $\pi \approx 3.14$.)



- A. About 31.4 square feet of patio area
- B. About 62.8 square feet of patio area

- C. About 314 square feet of patio area
- D. About 628 square feet of patio area

22. Occupational safety and health for most private-sector construction employers in Georgia is enforced under which authority?

- A. Federal OSHA, because Georgia operates under the federal OSHA program
- B. A Georgia state OSHA plan that fully replaces federal enforcement
- C. The Georgia Department of Labor's own independent workplace safety code
- D. The local county building department's safety inspection division

23. On a bench grinder, OSHA requires the work rest to be adjusted to a maximum distance from the abrasive wheel of what?

- A. 1/4 inch maximum gap between the work rest and the wheel
- B. 1/2 inch maximum gap between the work rest and the wheel
- C. 1/16 inch maximum gap between the work rest and the wheel
- D. 1/8 inch maximum gap between the work rest and the wheel

24. On many construction contracts, retainage withheld from progress payments is commonly set at what percentage of the payment?

- A. 1% to 2% of each progress payment
- B. 5% to 10% of each progress payment
- C. 20% to 25% of each progress payment
- D. 40% to 50% of each progress payment

25. Roofing is measured in "squares," where one square equals 100 square feet. A roof with 2,400 square feet of surface contains how many squares?

- A. 24 squares of roofing
- B. 240 squares of roofing
- C. 2.4 squares of roofing
- D. 48 squares of roofing

26. Under Georgia law, a Notice of Commencement is typically filed by which party at the start of a project?

- A. Each individual subcontractor before beginning its portion of the work
- B. The architect upon completing the project's design documents
- C. The owner or the general contractor near the start of construction
- D. The county tax assessor at the time the building permit is issued

27. OSHA requires that scaffold planks which overlap to form a continuous platform overlap a minimum distance, centered over a support, of what?

- A. 6 inches of overlap centered over the support
- B. 12 inches of overlap centered over the support
- C. 3 inches of overlap centered over the support
- D. 24 inches of overlap centered over the support

28. Under the IBC, an automatic fire sprinkler system is generally required in a Group M (mercantile) occupancy when the fire area exceeds approximately what size?

- A. 1,000 square feet of fire area
- B. 5,000 square feet of fire area
- C. 8,000 square feet of fire area
- D. 12,000 square feet of fire area

29. A crew of 4 workers is each paid \$25 per hour and works an 8-hour day. What is the total labor cost for one day?

- A. \$200 for the day
- B. \$400 for the day
- C. \$800 for the day
- D. \$1,000 for the day

30. Under Georgia and general U.S. law, a mechanic's (materialman's) lien generally cannot be placed against which type of property?

- A. Publicly owned property such as a government building or public school
- B. A privately owned single-family residence being renovated
- C. A privately owned commercial office building under construction
- D. A privately owned industrial warehouse receiving improvements

31. Under OSHA, a protective system is generally NOT required in an excavation under which of the following conditions?

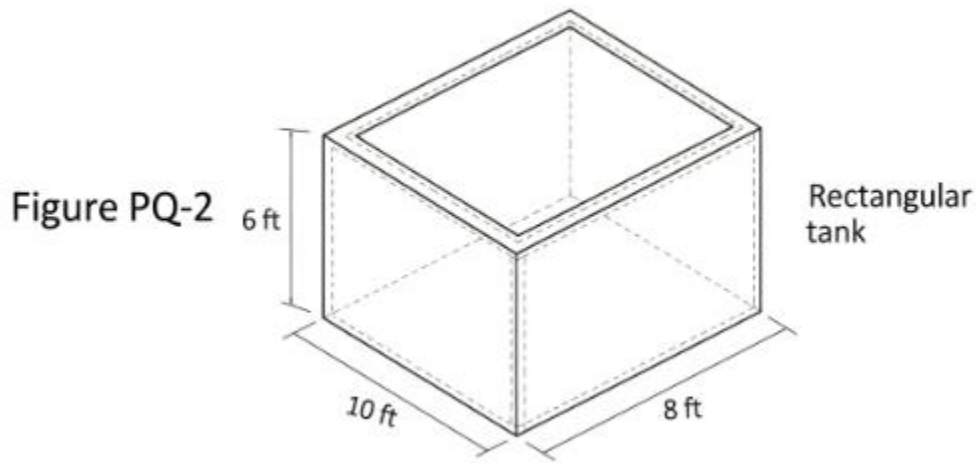
- A. The excavation is 6 feet deep in soft, previously disturbed Type C soil
- B. The excavation is in stable rock, or is under 5 feet deep with no cave-in hazard found
- C. The excavation is 10 feet deep with water seeping into the trench bottom
- D. The excavation is 8 feet deep in clay next to an adjacent roadway with traffic

32. Under a "time and materials" basis for extra work, the contractor is generally compensated for which of the following?

- A. A single fixed lump sum agreed upon before the extra work begins
- B. A guaranteed maximum price that cannot be exceeded under any circumstance
- C. A fixed unit price multiplied by the estimated quantity of the work

D. The actual labor hours and material costs plus an agreed markup

33. Using the dimensions shown, calculate the volume of the rectangular concrete tank in cubic feet.



- A. 480 cubic feet of volume
- B. 240 cubic feet of volume
- C. 96 cubic feet of volume
- D. 1,440 cubic feet of volume

34. Many Georgia project owners and the licensing board expect a general contractor to carry which type of insurance to cover third-party bodily injury and property damage?

- A. Builder's risk insurance covering the structure during construction only
- B. Professional liability (errors and omissions) insurance for design work
- C. Commercial general liability insurance covering bodily injury and property damage
- D. Key-person life insurance covering the company's designated qualifying agent

35. On a low-slope roof, OSHA permits a warning line system combined with a safety monitor under certain conditions. The warning line must generally be erected at least how far from the roof edge?

- A. At least 2 feet from the roof edge
- B. At least 4 feet from the roof edge
- C. At least 10 feet from the roof edge
- D. At least 6 feet from the roof edge

36. Under the IBC, an apartment building with multiple dwelling units intended for permanent residential occupancy is classified under which occupancy group?

- A. Group R-1, transient residential occupancy such as a hotel
- B. Group R-2, residential occupancy with multiple permanent dwelling units
- C. Group I-1, institutional occupancy providing assisted living care
- D. Group B, business occupancy used primarily for office functions

37. A 1,800-square-foot house is built for a total construction cost of \$342,000. What is the cost per square foot?

- A. \$150 per square foot
- B. \$175 per square foot
- C. \$190 per square foot
- D. \$210 per square foot

38. In a project network, a "finish-to-start" relationship between Activity A and Activity B means which of the following?

- A. Activity B cannot start until Activity A has finished
- B. Activity A cannot finish until Activity B has started
- C. Activities A and B must start at exactly the same time
- D. Activities A and B must finish at exactly the same time

39. Under OSHA, who is generally responsible for the cost of required personal protective equipment such as hard hats and most safety gear?

- A. The employee, who must purchase all of the required equipment personally
- B. The general contractor only, regardless of who actually employs the worker
- C. The project owner, as part of the overall construction contract terms
- D. The employer, who must provide most required PPE at no cost to the worker

40. In a set of contract documents, the "General Conditions" primarily establish which of the following?

- A. The exact quantities of each material to be installed on the project
- B. The rights, responsibilities, and relationships of the parties to the contract
- C. The detailed dimensions and locations shown for the building elements
- D. The day-by-day construction schedule for each trade on the project

41. Carpet is sold by the square yard. A room measuring 15 feet by 12 feet requires how many square yards of carpet?

- A. 20 square yards of carpet
- B. 60 square yards of carpet
- C. 180 square yards of carpet
- D. 6.7 square yards of carpet

42. Under Georgia consumer protection practice, a written contract for a home improvement project is most important because it does which of the following?

- A. Eliminates the contractor's obligation to obtain any building permits
- B. Transfers all liability for defects to the homeowner once it is signed

- C. Defines the scope, price, and terms, reducing disputes between the parties
- D. Allows the contractor to begin the work without the owner's signature

43. Before using a scissor lift or aerial lift on uneven ground, OSHA and manufacturer requirements generally call for which of the following?

- A. Removing the guardrails to lower the lift's center of gravity for stability
- B. Setting outriggers or stabilizers and ensuring the lift is on a firm, level surface
- C. Adding extra workers to the platform to counterbalance the elevated load
- D. Operating only at maximum travel speed to cross the rough ground quickly

44. The fire-resistance rating of a building assembly, such as a wall or floor, is expressed in which of the following units?

- A. British thermal units of heat the assembly is able to absorb
- B. Pounds per square foot of load the assembly can safely carry
- C. Degrees Fahrenheit the assembly can withstand before failing
- D. Hours the assembly can resist fire under standard test conditions

45. A driveway base requires 20 cubic yards of crushed stone. If crushed stone weighs about 1.4 tons per cubic yard, approximately how many tons should be ordered?

- A. About 14 tons of crushed stone
- B. About 20 tons of crushed stone
- C. About 28 tons of crushed stone
- D. About 40 tons of crushed stone

46. If a consumer files a complaint against a licensed Georgia contractor, the matter is generally handled by which body?

- A. The Georgia State Licensing Board for Residential and General Contractors
- B. The federal Occupational Safety and Health Administration regional office
- C. The International Code Council's national code enforcement division
- D. The local homeowners' association where the project was performed

47. Under OSHA, a personal fall arrest system must be rigged so that a worker cannot free-fall more than what distance?

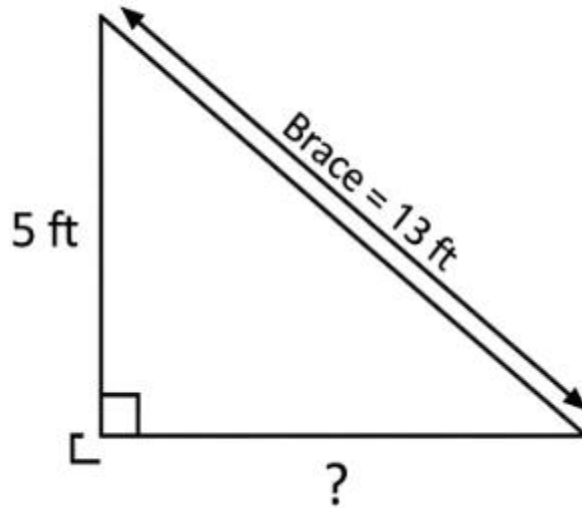
- A. More than 2 feet of free fall is permitted before the system arrests it
- B. No more than 6 feet of free fall, and without contacting a lower level
- C. No more than 12 feet of free fall before the system arrests the fall
- D. No more than 18 feet of free fall before the system arrests the fall

48. In a surety bond arrangement on a construction project, the "obligee" is which party?

- A. The surety company that issues the bond in exchange for a premium
- B. The subcontractor who furnishes labor and materials on the project
- C. The contractor (principal) who is required to obtain the bond
- D. The owner who is protected by and benefits from the bond

49. A diagonal brace forms the hypotenuse of a right triangle as shown. If the brace is 13 feet long and the vertical leg is 5 feet, what is the length of the horizontal leg?

Figure PQ-3



- A. 12 feet for the horizontal leg
- B. 8 feet for the horizontal leg
- C. 18 feet for the horizontal leg
- D. 9 feet for the horizontal leg

50. In Georgia, the statewide minimum standard construction codes and their state amendments are adopted and maintained by which agency?

- A. The federal Department of Housing and Urban Development
- B. The Georgia State Licensing Board for Contractors directly
- C. The Georgia Department of Community Affairs (DCA)
- D. The International Code Council headquartered outside of Georgia

ANSWER KEY WITH EXPLANATIONS

- 1. D** — Exposed protruding rebar onto which a worker could fall must be guarded with protective caps or troughs capable of resisting the impalement hazard. OSHA requires elimination of the impalement risk, and rated caps or troughs absorb or distribute the force of a fall. Paint or signs do nothing to prevent a body from being impaled.
- 2. B** — Forty sheets are needed: 1,280 square feet of surface divided by the 32 square feet each 4-by-8 sheet covers. Dividing the total area to be covered by the coverage per unit gives the count before waste. Estimating sheet quantities accurately avoids mid-job shortages.
- 3. A** — The Residential Contractor Recovery Fund is the state mechanism intended to compensate certain homeowners harmed by a licensed residential contractor's misconduct. Such funds provide limited recovery when other remedies fail. They are funded through licensee fees rather than county or permit revenue.
- 4. C** — For lines rated up to 50 kV, OSHA requires a minimum clearance of 10 feet between the crane (and its load) and the energized conductors. Higher voltages require proportionally greater clearance. Maintaining this distance prevents electrocution from contact or arcing, a leading cause of crane fatalities.
- 5. B** — Under standard forms such as the AIA documents, the contractor's general obligation to correct defective work runs for one year after substantial completion. This correction period is a contractual remedy and is separate from longer statutory warranty or repose periods. It gives the owner a defined window to require no-cost correction.
- 6. A** — In a sprinklered Group B occupancy, the IBC generally allows a maximum exit access travel distance of 300 feet. Automatic sprinklers earn the longer allowance because they slow fire growth and buy egress time. Without sprinklers, the limit drops to 200 feet.
- 7. D** — Twelve bags are needed: 6 cubic feet of required concrete divided by the 0.5 cubic feet each bag yields. Dividing total volume by yield per bag gives the count. Buying by yield prevents running short on a small pour.
- 8. C** — Compressed gas cylinders must be secured upright, and oxygen must be separated from fuel-gas cylinders by distance or a noncombustible barrier. This separation prevents an oxygen-enriched fire if a leak occurs. Improper storage of oxygen and fuel gas together is a serious explosion and fire hazard.
- 9. A** — Georgia's Residential-Basic classification limits the licensee to detached one- and two-family dwellings and their accessory structures. The tier matches the contractor's qualification to the scale and complexity of the work. Larger commercial and high-rise work requires a broader license.
- 10. C** — An allowance is a budgeted sum included in the contract for items not yet fully selected or specified, such as fixtures or finishes. When the actual selection is made, the contract price is adjusted up or down against the allowance. Allowances let a project move forward before every product choice is final.

11. B — For Class A fire hazards, OSHA limits the maximum travel distance to reach an extinguisher to 75 feet. Class B hazards use a shorter 50-foot maximum because flammable-liquid fires spread faster. Proper placement ensures a worker can reach an extinguisher quickly.

12. D — Fifteen truckloads are required: 180 loose cubic yards divided by the 12-cubic-yard truck capacity. Dividing total volume to haul by capacity per load gives the number of trips. This figure drives hauling time and cost estimates.

13. C — Georgia requires 6 hours of continuing education per renewal cycle for general and residential contractor licensees. Continuing education keeps licensees current on code, law, and safety changes. Completing it is a condition of license renewal.

14. A — Before demolition begins, OSHA requires an engineering survey conducted by a competent person to assess the structure's condition and the possibility of unplanned collapse. The survey identifies hazards such as weakened framing or hazardous materials before workers are exposed. Skipping it risks catastrophic collapse during demolition.

15. B — IBC guards must be built so that a 4-inch-diameter sphere cannot pass through the openings in typical occupancies. This limit keeps small children from slipping through or becoming entrapped. The sphere rule defines the maximum allowable spacing of balusters or infill.

16. D — About 334 pounds: 500 linear feet of #4 bar multiplied by 0.668 pounds per foot. Multiplying length by unit weight gives total weight for ordering and load planning. Accurate steel weights matter for both pricing and handling.

17. A — Under Georgia's prompt payment law, a contractor who receives payment from the owner must pay subcontractors their earned share within 10 days. The rule keeps payment flowing down the chain to those who performed the work. Late payment can expose the contractor to interest and penalties.

18. C — When combustibles cannot be moved away from hot work, a fire watch with extinguishing equipment must be present during the work and for a period afterward. Sparks and slag can smolder and ignite long after cutting stops, so the watch continues past completion. This practice prevents delayed fires.

19. D — In design-build, a single entity is responsible for both designing and constructing the project under one contract with the owner. This contrasts with design-bid-build, where the owner contracts separately with a designer and a contractor. Single-point responsibility can streamline coordination and shorten schedules.

20. B — A lot with 100 spaces must provide at least 4 accessible spaces, following the schedule of 1 per 25 spaces in the lower ranges (1–25 = 1, 26–50 = 2, 51–75 = 3, 76–100 = 4). The ratio ensures accessible parking scales with lot size. A portion of accessible spaces must also be van-accessible.

21. C — The area is about 314 square feet: π times the 10-foot radius squared (3.14×100). The circle-area formula uses the radius, not the diameter, so squaring the radius is the key step. Correct area drives accurate concrete ordering for the patio.

22. A — Georgia does not operate its own state OSHA plan for private-sector employers, so federal OSHA enforces occupational safety for most private construction work there. Employers must comply with federal construction standards. Knowing the governing authority clarifies whose rules and inspectors apply.

23. D — OSHA requires the work rest on a bench grinder to be adjusted to within 1/8 inch of the abrasive wheel. A wider gap can let the workpiece be drawn between the rest and wheel, causing the wheel to shatter or the part to jam. The separate tongue guard must be kept within 1/4 inch of the wheel.

24. B — Retainage on construction contracts is commonly set at 5% to 10% of each progress payment. The withheld amount gives the owner leverage to ensure the work is completed and corrected. It is released at or near final completion.

25. A — Twenty-four squares: 2,400 square feet of roof divided by 100 square feet per square. Roofing materials and labor are priced by the square, so converting area to squares is routine. The conversion keeps takeoffs aligned with how roofing is sold.

26. C — In Georgia, the Notice of Commencement is filed by the owner or the general contractor near the start of construction. It provides project information that suppliers and subs use to protect their lien rights. Proper filing affects the lien procedures that follow.

27. B — Scaffold planks that overlap to form a continuous platform must overlap at least 12 inches, centered over a support, unless they are restrained from movement. Adequate overlap keeps a plank from tipping or sliding off its support under load. Insufficient overlap is a fall and collapse hazard.

28. D — The IBC generally requires automatic sprinklers in a Group M occupancy when the fire area exceeds 12,000 square feet. Sprinklers control fire growth in large retail spaces with significant fuel loads. The threshold balances fire risk against the cost of protection.

29. C — The total daily labor cost is \$800: 4 workers times \$25 per hour times 8 hours. Multiplying crew size by hourly rate and hours worked gives the day's labor cost. This is the building block of labor estimating and job costing.

30. A — A mechanic's lien generally cannot attach to publicly owned property such as a government building or public school. Public assets are protected from forced sale, so payment bonds protect subs and suppliers on public jobs instead. Knowing this steers claimants to the correct remedy.

31. B — A protective system is not required when an excavation is made entirely in stable rock, or is less than 5 feet deep and a competent person determines there is no potential for a cave-in. In all other cases, sloping, shoring, or shielding is mandatory. The exception is narrow and rests on the competent person's judgment.

32. D — On a time-and-materials basis, the contractor is paid for actual labor hours and material costs plus an agreed markup. This method suits work whose scope cannot be defined in advance. Because cost is open-ended, owners often pair it with a not-to-exceed limit.

- 33. A** — The volume is 480 cubic feet: 10 feet by 8 feet by 6 feet. Multiplying length, width, and height gives the volume of a rectangular solid. Accurate volume drives both concrete and capacity calculations for the tank.
- 34. C** — Commercial general liability insurance covers third-party bodily injury and property damage arising from the contractor's operations. It protects against claims by owners, the public, and others harmed during the work. It is distinct from builder's risk, which covers the project itself.
- 35. D** — On a low-slope roof, a warning line must be erected at least 6 feet from the roof edge when used as part of a permitted system. The line marks a zone where additional protection is needed nearer the edge. The setback keeps workers a safe distance from the fall hazard.
- 36. B** — An apartment building with multiple permanent dwelling units is classified as Group R-2 under the IBC. R-1 covers transient lodging such as hotels, while R-2 covers permanent multifamily residences. The classification drives fire-protection and egress requirements for the building.
- 37. C** — The cost per square foot is \$190: \$342,000 divided by 1,800 square feet. Dividing total cost by floor area yields the unit cost used for benchmarking and conceptual estimating. Cost-per-square-foot figures help compare projects and set early budgets.
- 38. A** — A finish-to-start relationship means Activity B cannot start until Activity A has finished. It is the most common logical tie in construction scheduling, such as framing before drywall. Correctly modeling these dependencies produces an accurate critical path.
- 39. D** — OSHA requires the employer to provide most required PPE at no cost to the worker. Limited exceptions exist, such as ordinary safety-toe footwear and prescription safety eyewear that workers may keep. Placing the cost on the employer ensures workers are not deterred from using protection.
- 40. B** — The General Conditions establish the rights, responsibilities, and relationships of the parties to the contract, such as payment, changes, and dispute procedures. They are the "rules of the game," separate from the drawings and specifications that describe the physical work. Understanding them is essential to administering a contract.
- 41. A** — Twenty square yards: the 15-by-12-foot room is 180 square feet, divided by 9 square feet per square yard. Carpet is sold by the square yard, so converting square feet to square yards is necessary for ordering. The 9-square-feet-per-yard conversion is the key step.
- 42. C** — A written home improvement contract is most valuable because it defines the scope, price, and terms, which reduces disputes between the contractor and homeowner. Clear documentation protects both parties if disagreements arise. It does not waive permits or shift defect liability to the owner.
- 43. B** — Before using a scissor or aerial lift on uneven ground, the operator must set any outriggers or stabilizers and ensure the lift is on a firm, level surface. Stability is critical because tip-overs are a leading cause of lift fatalities. Removing guardrails or overloading the platform would increase, not reduce, the danger.

44. D — A fire-resistance rating is expressed in hours, indicating how long an assembly resists fire under a standard test such as ASTM E119. The rating reflects time to structural failure or heat transmission, not temperature or load directly. Ratings determine which assemblies satisfy required separations.

45. C — About 28 tons: 20 cubic yards multiplied by 1.4 tons per cubic yard. Converting volume to weight is necessary because aggregate is often sold and hauled by the ton. The unit-weight conversion is the key step in the order.

46. A — A consumer complaint against a licensed Georgia contractor is handled by the Georgia State Licensing Board for Residential and General Contractors. The board investigates and can impose discipline on its licensees. It is the proper venue for licensing-related grievances.

47. B — A personal fall arrest system must be rigged so the worker cannot free-fall more than 6 feet, nor contact any lower level during the fall. Limiting free fall controls the impact forces generated when the system arrests the fall. Proper rigging and anchor placement keep those forces within safe limits.

48. D — The obligee is the party protected by and benefiting from the bond, which on a construction project is the owner. The contractor is the principal, who must obtain the bond, and the surety is the company that issues it. Understanding these roles clarifies who is protected if the contractor defaults.

49. A — The horizontal leg is 12 feet: the square root of $(13^2 - 5^2)$, or the square root of 144. Subtracting the square of the known leg from the square of the hypotenuse and taking the root yields the missing leg. This Pythagorean calculation is common in bracing and layout work.

50. C — The Georgia Department of Community Affairs adopts and maintains the statewide minimum standard construction codes and their state amendments. Local building officials then enforce these codes at the project level. Knowing the source of the codes clarifies where statewide requirements originate.