

PRACTICE EXAM 20 QUESTION (1 -50)

1. OSHA requires employers to provide potable drinking water on the job site. Which of the following is a requirement for that drinking water supply?

- A. It must be dispensed only from a single shared cup for all workers
- B. It must be potable, and any common drinking cups are prohibited
- C. It may be replaced entirely with carbonated beverages if preferred
- D. It must be heated to a minimum temperature before being served

2. A contractor owns equipment that cost \$90,000 and is expected to give 6,000 hours of useful service with no salvage value. What is the straight-line ownership (depreciation) cost per hour?

- A. \$9.00 per hour
- B. \$12.00 per hour
- C. \$18.00 per hour
- D. \$15.00 per hour

3. In Georgia, when a contractor's invoice separately states the charge for installation labor apart from materials, that labor charge is generally treated how for sales tax purposes?

- A. Taxed at twice the standard rate because it is construction labor
- B. Taxed at the same rate as the materials portion of the invoice
- C. Generally not subject to sales tax when separately stated from materials
- D. Subject to a special federal labor tax remitted to the IRS quarterly

4. Under OSHA's steel erection standard, ironworkers other than connectors must generally be protected from falls when working at a height greater than what?

- A. 15 feet above a lower level
- B. 6 feet above a lower level
- C. 10 feet above a lower level
- D. 4 feet above a lower level

5. A worker earns \$30 per hour and works 45 hours in a week, with overtime over 40 hours paid at 1.5 times the base rate. What is the worker's gross pay for the week?

- A. \$1,350 in gross pay
- B. \$1,200 in gross pay
- C. \$1,400 in gross pay
- D. \$1,425 in gross pay

6. A contractor encounters unexpected subsurface rock not shown in the contract documents. To preserve a claim for additional compensation, the contractor should generally do which of the following?

- A. Continue working and submit the extra cost in the final invoice without any notice
- B. Provide timely written notice of the differing site condition per the contract
- C. Stop all work permanently until the owner agrees to a higher contract price
- D. Absorb the cost silently because subsurface conditions are always the contractor's risk

7. Under OSHA, the classification of soil for excavation safety must be based on which of the following?

- A. The color of the soil as observed at the surface of the ground
- B. The contractor's preference in order to minimize the cost of protection
- C. At least one visual and one manual analysis by a competent person

D. The depth of the excavation alone, regardless of the soil properties

8. Under the IBC, installing an automatic sprinkler system in a building generally affects the allowable building area and height in which way?

- A. It permits increases in the allowable area and height of the building
- B. It has no effect on allowable area or height under any circumstances
- C. It requires a reduction in the allowable area and height for safety
- D. It eliminates all limits on building area and height entirely

9. A contractor invests \$50,000 in new equipment and realizes \$65,000 in net benefit from it over its life. What is the return on investment (ROI)?

- A. 15% return on investment
- B. 23% return on investment
- C. 65% return on investment
- D. 30% return on investment

10. To qualify to sit for the Georgia general contractor examination, an applicant must typically demonstrate which of the following?

- A. Ownership of a licensed contracting business for at least one year
- B. A specified amount of relevant construction experience and references
- C. A four-year college degree in civil or structural engineering only
- D. Completion of a federal apprenticeship registered with the U.S. government

11. Under OSHA's lockout/tagout standard, a lock placed by an authorized employee to control hazardous energy should generally be removed by whom?

- A. The same authorized employee who applied the lock, except in limited cases

- B. Any worker on the crew who needs the equipment running again
- C. The first-shift supervisor at the end of every workday automatically
- D. The equipment manufacturer's representative during a service call

12. Final payment to a contractor, including release of retainage, is typically conditioned on which of the following?

- A. The contractor providing a personal guarantee of all future repairs
- B. The owner obtaining a new mortgage on the completed property
- C. Completion of the work, including the punch list and required closeout documents
- D. The architect agreeing to waive all design errors on the project

13. A continuous footing is 120 feet long, 2 feet wide, and 1 foot deep. How many cubic yards of concrete are required?

- A. About 4.4 cubic yards of concrete
- B. About 6.7 cubic yards of concrete
- C. About 13.3 cubic yards of concrete
- D. About 8.9 cubic yards of concrete

14. Under Georgia law, which of the following parties is generally entitled to claim a mechanic's or materialman's lien?

- A. A lender who financed the owner's purchase of the land only
- B. A subcontractor or supplier who furnished labor or materials to improve the property
- C. A real estate agent who brokered the sale of the property
- D. A neighbor inconvenienced by the noise during the construction work

15. Under OSHA's hierarchy of controls, which approach to a workplace hazard is generally the most preferred?

- A. Providing each worker with appropriate personal protective equipment
- B. Posting warning signs around the hazardous area for general awareness
- C. Eliminating the hazard or substituting a less hazardous process
- D. Rotating workers to limit each person's exposure time to the hazard

16. Under the IBC, a school classroom area uses an occupant load factor of about 20 net square feet per person. A 1,000-square-foot classroom would have an occupant load of approximately what?

- A. 50 occupants in the classroom
- B. 100 occupants in the classroom
- C. 20 occupants in the classroom
- D. 200 occupants in the classroom

17. A supplier offers a 2% discount for payment within 10 days on a \$15,000 materials invoice. How much is the discount if the contractor pays early?

- A. \$150 discount for early payment
- B. \$300 discount for early payment
- C. \$450 discount for early payment
- D. \$1,500 discount for early payment

18. A Georgia general contractor applicant who cannot meet the net-worth requirement through a financial statement may often satisfy financial responsibility by which of the following?

- A. Submitting personal tax returns from the prior three years only
- B. Providing a letter of credit from a relative or business partner
- C. Pledging the contractor's tools and vehicles as collateral
- D. Furnishing a surety bond in an amount set by the board

19. OSHA requires that the suspension ropes and connecting hardware on a suspended scaffold be capable of supporting at least how many times the maximum intended load?

- A. 2 times the maximum intended load
- B. 4 times the maximum intended load
- C. 6 times the maximum intended load
- D. 10 times the maximum intended load

20. Under the IBC, a stairway must have a landing at the top and bottom, and the maximum vertical rise of a single flight between landings is generally limited to which of the following?

- A. 12 feet of vertical rise between landings
- B. 8 feet of vertical rise between landings
- C. 16 feet of vertical rise between landings
- D. 20 feet of vertical rise between landings

21. A task requires 0.5 labor-hours per square foot of installation. For a 600-square-foot area, how many labor-hours are required?

- A. 120 labor-hours
- B. 1,200 labor-hours
- C. 200 labor-hours
- D. 300 labor-hours

22. Under Georgia law, a licensed contractor is generally expected to include which of the following on contracts and related documents?

- A. The home address of every employee assigned to the project
- B. The contractor's state license number identifying the license
- C. A notarized copy of the contractor's most recent tax return

D. The cell phone numbers of all of the project's subcontractors

23. OSHA requires that construction areas, ramps, and walkways be lighted while work is in progress. General construction areas must have at least what illumination level?

- A. 1 foot-candle of illumination in general construction areas
- B. 10 foot-candles of illumination in general construction areas
- C. 5 foot-candles of illumination in general construction areas
- D. 30 foot-candles of illumination in general construction areas

24. A "manufacturer's warranty" on an installed product, as opposed to the contractor's workmanship warranty, generally covers which of the following?

- A. Defects in the product itself as supplied by the manufacturer
- B. Errors in how the contractor installed the product on site
- C. Damage caused by the owner's misuse of the product after installation
- D. The cost of routine maintenance the owner must perform over time

25. A contractor completes a job with a selling price of \$80,000 and a gross margin of 25%. How many dollars of gross profit did the job produce?

- A. \$16,000 of gross profit
- B. \$20,000 of gross profit
- C. \$24,000 of gross profit
- D. \$32,000 of gross profit

26. In construction scheduling, a "milestone" is best described as which of the following?

- A. An activity that consumes the largest amount of project resources

- B. The total amount of float available on the critical path activities
- C. A buffer of extra time added to protect the project completion date
- D. A significant point or event in the project that itself has no duration

27. When flaggers are used to control traffic through a construction work zone, OSHA requires that they wear which of the following?

- A. High-visibility warning garments and use approved signaling devices
- B. Standard street clothing as long as a vehicle is parked nearby
- C. Hearing protection only, since visibility is not a concern for flaggers
- D. A respirator to protect against vehicle exhaust at all times

28. The compressive strength of concrete is specified and tested in which of the following units?

- A. Pounds per linear foot of the concrete member
- B. Cubic yards delivered to the project site
- C. Pounds per square inch (psi) at a specified age
- D. Degrees Fahrenheit reached during the curing process

29. A parking area requires 50 cubic yards of asphalt. If asphalt weighs about 2 tons per cubic yard, approximately how many tons are needed?

- A. 50 tons of asphalt
- B. 100 tons of asphalt
- C. 25 tons of asphalt
- D. 150 tons of asphalt

30. Following a disciplinary hearing, the Georgia State Licensing Board may impose which of the following on a licensee found to have violated the rules?

- A. A criminal prison sentence imposed directly by the board
- B. A federal tax lien placed on the licensee's personal income
- C. An order requiring the licensee to change its business banks
- D. Fines, license suspension, or license revocation, among other sanctions

31. A fire involving energized electrical equipment should be fought with a fire extinguisher rated for which class of fire?

- A. Class A for ordinary combustibles such as wood and paper
- B. Class B for flammable liquids and gases such as fuels
- C. Class C for fires involving energized electrical equipment
- D. Class D for combustible metals such as magnesium

32. Under accessibility requirements, the maximum height of a threshold at an accessible doorway is generally limited to which of the following?

- A. 1/2 inch high, with beveling required above 1/4 inch
- B. 1 inch high with no beveling required at all
- C. 2 inches high to accommodate weather sealing
- D. 3 inches high where exterior doors are involved

33. Material prices are expected to rise 8% by the time a project is built. A material currently costing \$50,000 would be expected to cost approximately how much then?

- A. \$52,000 at the future price
- B. \$54,000 at the future price
- C. \$58,000 at the future price
- D. \$40,000 at the future price

34. Under Georgia's prompt payment law for private projects, an owner must generally pay the contractor's properly submitted invoice within what period, unless the contract states otherwise?

- A. Within 7 days of receiving the proper invoice
- B. Within 90 days of receiving the proper invoice
- C. Within 45 days of receiving the proper invoice
- D. Within 15 days of receiving the proper invoice

35. During a permit-required confined space entry, the attendant stationed outside the space is generally responsible for which of the following?

- A. Monitoring entrants and the space, and ordering evacuation if needed
- B. Entering the space periodically to assist the workers with their tasks
- C. Leaving the site to retrieve tools whenever the entrants request them
- D. Signing the permit on behalf of the entry supervisor when absent

36. Under the IBC, the maximum length of a dead-end corridor in many sprinklered occupancies is generally limited to which of the following?

- A. 10 feet for a dead-end corridor
- B. 100 feet for a dead-end corridor
- C. 50 feet for a dead-end corridor
- D. 75 feet for a dead-end corridor

37. A job is estimated at 120 labor-hours. If a crew of 3 works 8 hours per day, how many days will the job take?

- A. 3 days to complete
- B. 5 days to complete
- C. 8 days to complete

D. 10 days to complete

38. In Georgia, an employer required to carry workers' compensation insurance who willfully fails to do so may face which of the following?

- A. A warning letter only, with no monetary or other penalty
- B. Automatic licensure as a self-insured employer by the state
- C. A reduction in the employer's future unemployment tax rate
- D. Civil penalties and possible misdemeanor criminal liability

39. OSHA requires eye and face protection whenever which of the following is true?

- A. There is a reasonable probability of injury that such protection can prevent
- B. The worker personally chooses to wear it for added comfort on the job
- C. Only when grinding metal, and never for any other site activity
- D. Exclusively when an OSHA inspector has issued a prior citation

40. A building official who observes work performed in violation of the code or without a permit generally has the authority to issue which of the following?

- A. A binding arbitration award resolving the contractor's payment dispute
- B. A lien against the contractor's personal residence for the violation
- C. A stop-work order halting the work until the issue is corrected
- D. A revocation of the contractor's state license without any hearing

41. A rectangular building measures 75 feet by 40 feet. What is the total floor area?

- A. 230 square feet of floor area
- B. 3,000 square feet of floor area

- C. 1,500 square feet of floor area
- D. 300 square feet of floor area

42. The Georgia general contractor trade examination is administered in which of the following formats?

- A. A purely oral interview conducted by a board panel member
- B. A hands-on field demonstration at an active construction site
- C. A take-home written project submitted over several weeks
- D. A proctored exam, generally open-book using approved reference materials

43. Naming a project owner as an "additional insured" on the contractor's liability policy generally accomplishes which of the following?

- A. Transfers ownership of the insurance policy entirely to the owner
- B. Requires the owner to pay the premiums on the contractor's policy
- C. Extends certain coverage of the contractor's policy to the owner
- D. Cancels the owner's own separate insurance coverage on the project

44. Under OSHA, scaffolds must be erected, moved, dismantled, or altered under the supervision and direction of which of the following?

- A. A competent person qualified in scaffold erection and use
- B. The project owner or the owner's designated representative
- C. Any worker who has been on the job site for over thirty days
- D. The local building inspector assigned to the project

45. Direct costs on a job are \$150,000. The contractor adds 12% for overhead and 10% profit, each applied in sequence to the running total. What is the final price?

- A. \$183,000 final price
- B. \$180,000 final price
- C. \$165,000 final price
- D. \$184,800 final price

46. Under Georgia law, a claim of lien must be filed in the records of which office to be effective?

- A. The Georgia Secretary of State's corporate records division
- B. The clerk of the superior court in the county where the property is located
- C. The Georgia State Licensing Board's lien registry in Atlanta
- D. The federal district court covering the project's location

47. A pneumatic (air-powered) nailing or stapling tool operating above a certain pressure must have which of the following under OSHA?

- A. A safety device on the muzzle to prevent ejection unless pressed to the work
- B. A pressure gauge mounted directly on the handle of every tool
- C. A second worker holding the air hose during the entire operation
- D. A grounding wire connecting the tool to the building's electrical system

48. Under the residential provisions of the code, smoke alarms in a new dwelling are generally required to be located in which of the following?

- A. Only in the kitchen near the cooking appliances
- B. Only in the attic and the crawl space areas
- C. In each sleeping room, outside each sleeping area, and on every level
- D. Only at the main entrance door to the dwelling

49. A contractor's company had revenue of \$1,000,000 and a net profit of \$40,000 for the year. What was the net profit margin?

- A. 40% net profit margin
- B. 14% net profit margin
- C. 10% net profit margin
- D. 4% net profit margin

50. Georgia classifies its adopted construction codes into mandatory codes and permissive codes. A "mandatory" code is best described as which of the following?

- A. A code that applies only if a local jurisdiction chooses to adopt it
- B. A code that applies statewide without the need for local adoption
- C. A code that applies only to state-owned government buildings
- D. A code that has been repealed but is kept for historical reference

ANSWER KEY WITH EXPLANATIONS

1. B — The job-site water supply must be potable, and common (shared) drinking cups are prohibited. Single-use cups or sanitary dispensers prevent the spread of illness among workers. Providing clean drinking water is a basic OSHA sanitation requirement.

2. D — The hourly ownership cost is \$15.00: the \$90,000 cost divided by 6,000 hours of useful life with no salvage value. Straight-line depreciation spreads the cost evenly over the asset's service life. Knowing this rate lets a contractor build equipment cost into job bids.

3. C — In Georgia, installation labor that is separately stated from materials on the invoice is generally not subject to sales tax. The tax applies to the materials, while clearly itemized labor is exempt. Proper invoicing can therefore affect the customer's total tax.

4. A — Under the steel erection standard, ironworkers other than connectors must be protected from falls above 15 feet. The higher trigger reflects the realities of structural steel work, with separate provisions for connectors and deckers. Applying the correct threshold ensures workers are protected at the right height.

- 5. D** — Gross pay is \$1,425: 40 regular hours at \$30 (\$1,200) plus 5 overtime hours at \$45 (\$225). Overtime over 40 hours is paid at one and one-half times the base rate. Calculating regular and premium hours separately yields the correct total.
- 6. B** — To preserve a claim for a differing site condition such as unexpected rock, the contractor must give timely written notice as the contract requires. Prompt notice lets the owner investigate and preserves the contractor's right to added cost or time. Failing to notify often waives the claim.
- 7. C** — Soil for excavation safety must be classified using at least one visual and one manual analysis performed by a competent person. Combining tests gives a reliable basis for choosing sloping, shoring, or shielding. Misclassifying soil can lead to a deadly cave-in.
- 8. A** — Installing automatic sprinklers generally allows increases in the allowable area and height of a building under the IBC. Sprinklers reduce fire risk, so the code rewards them with greater design flexibility. This trade-off is a key tool in code-compliant building design.
- 9. D** — The ROI is 30%: the \$15,000 net gain (\$65,000 – \$50,000) divided by the \$50,000 investment. Return on investment measures gain relative to the amount invested. It helps a contractor decide whether an equipment purchase is worthwhile.
- 10. B** — A Georgia general contractor applicant must typically demonstrate a specified amount of relevant construction experience along with references. The requirement confirms the applicant has practical competence before sitting for the exam. It protects the public by screening for qualified candidates.
- 11. A** — Under lockout/tagout rules, the lock should generally be removed by the same authorized employee who applied it, with only narrow exceptions under a documented procedure. This ensures the person who knows the work is finished controls re-energization. Allowing others to remove locks freely defeats the protection.
- 12. C** — Final payment and release of retainage are typically conditioned on completion of the work, including the punch list and required closeout documents such as lien waivers and warranties. These conditions confirm the project is truly finished and the owner is protected. Only then is the full balance released.
- 13. D** — About 8.9 cubic yards: 120 by 2 by 1 foot equals 240 cubic feet, divided by 27. Computing volume in cubic feet and converting to yards is the standard concrete takeoff. Accurate volume avoids ordering short on the pour.
- 14. B** — A subcontractor or supplier who furnished labor or materials to improve the property is generally entitled to a Georgia mechanic's lien. Lenders, brokers, and third parties who did not improve the property are not. The lien secures payment for those who added value to the real estate.
- 15. C** — Under the hierarchy of controls, eliminating the hazard or substituting a less hazardous process is the most preferred approach. Removing the hazard at its source is more reliable than controls that depend on worker behavior or equipment. PPE sits at the bottom as the last line of defense.

16. A — The occupant load is 50: 1,000 square feet divided by the 20-square-foot-per-person classroom factor. The occupant load factor converts floor area into the design number of people. That figure then drives the required egress capacity.

17. B — The discount is \$300: 2% of the \$15,000 invoice. Early-payment discounts reward prompt payment and lower material costs. Taking such discounts can meaningfully improve a contractor's margins over time.

18. D — A Georgia applicant who cannot meet the net-worth requirement by financial statement may instead furnish a surety bond in an amount set by the board. The bond provides financial protection to the public in place of demonstrated net worth. This alternative lets qualified contractors still obtain licensure.

19. C — Suspension ropes and connecting hardware on a suspended scaffold must support at least 6 times the maximum intended load. The higher factor reflects the critical, life-dependent role of the ropes that hold the scaffold aloft. Supported scaffolds, by contrast, require a factor of 4.

20. A — The IBC limits the vertical rise of a single stair flight to about 12 feet between landings. Landings break up long runs so a fall cannot carry a person the full height of the stair. The limit improves both safety and usability.

21. B — Wait — the keyed answer is D. The job requires 300 labor-hours: 600 square feet multiplied by 0.5 labor-hours per square foot. Multiplying the quantity by the unit labor rate gives total labor-hours for estimating and scheduling.

22. B — A licensed Georgia contractor is generally expected to include its state license number on contracts and related documents. Displaying the number lets consumers verify licensure and supports accountability. It is part of operating transparently and legally.

23. C — General construction areas must be lighted to at least 5 foot-candles while work is in progress. Adequate illumination prevents trips, falls, and other errors in dim conditions. Areas such as first aid stations and offices require higher levels.

24. A — A manufacturer's warranty covers defects in the product itself as supplied, separate from the contractor's responsibility for proper installation. If the product fails due to a manufacturing defect, the maker stands behind it. Installation errors fall under the contractor's workmanship warranty instead.

25. B — The gross profit is \$20,000: 25% of the \$80,000 selling price. Gross margin is figured on the selling price, so multiplying price by the margin rate gives the profit dollars. This is the amount available to cover overhead and net profit.

26. D — A milestone is a significant point or event in the schedule, such as "foundation complete," that itself has no duration. Milestones mark progress and key handoffs rather than consuming time. They are valuable reference points for tracking a project.

- 27. A** — Flaggers controlling traffic must wear high-visibility warning garments and use approved signaling devices such as STOP/SLOW paddles. Being seen by drivers is essential to the flagger's own safety. Proper apparel and devices reduce work-zone struck-by incidents.
- 28. C** — Concrete compressive strength is specified and tested in pounds per square inch (psi) at a specified age, typically 28 days. The psi value indicates how much load the cured concrete can resist. Specifying the right strength is essential to structural performance.
- 29. B** — About 100 tons: 50 cubic yards multiplied by 2 tons per cubic yard. Converting volume to weight is necessary because asphalt is sold and hauled by the ton. The unit-weight conversion is the key step in the order.
- 30. D** — After a disciplinary hearing, the Georgia board may impose sanctions such as fines, license suspension, or license revocation. These administrative penalties enforce compliance with licensing law. The board does not impose prison sentences or federal tax liens.
- 31. C** — A fire involving energized electrical equipment requires a Class C-rated extinguisher, whose agent does not conduct electricity. Using a water-based (Class A) extinguisher on a live electrical fire risks electrocution. Matching the extinguisher class to the fuel is critical to safe firefighting.
- 32. A** — An accessible doorway threshold is limited to 1/2 inch in height, and any portion above 1/4 inch must be beveled. Low, beveled thresholds let wheelchairs and walkers pass without catching. This is a core accessibility detail at doors.
- 33. D** — Wait — the keyed answer is B. The expected future cost is \$54,000: \$50,000 multiplied by 1.08 to reflect the 8% price increase. Applying an escalation factor projects today's cost to the time of construction. Accounting for escalation protects the budget on projects bid well before they are built.
- 34. D** — Under Georgia's prompt payment law for private projects, an owner must generally pay a properly submitted invoice within 15 days unless the contract states otherwise. The rule keeps payment moving promptly to the contractor. Late payment can trigger statutory interest.
- 35. A** — The confined space attendant monitors the entrants and conditions in and around the space and orders evacuation if a hazard arises. The attendant must remain outside and not enter to perform rescue that would leave the post unattended. This continuous monitoring is central to entrant safety.
- 36. C** — In many sprinklered occupancies, the IBC limits a dead-end corridor to 50 feet. A dead-end forces occupants to backtrack, so its length is capped to limit the distance to a usable exit path. Sprinklers permit the longer 50-foot allowance versus the shorter base limit.
- 37. B** — The job takes 5 days: 120 labor-hours divided by the 24 labor-hours a 3-person crew produces in an 8-hour day. Dividing total labor-hours by daily crew output gives the duration. This converts an estimate into a schedule.
- 38. D** — A Georgia employer who willfully fails to carry required workers' compensation insurance may face civil penalties and possible misdemeanor criminal liability. The law backs the coverage requirement

with real consequences. Maintaining coverage protects both workers and the employer from these penalties.

39. A — OSHA requires eye and face protection whenever there is a reasonable probability of injury that such protection can prevent. The trigger is the presence of a credible hazard, not worker preference or an inspector's presence. Matching protection to the hazard prevents disabling eye injuries.

40. C — A building official who finds work being done in violation of the code or without a permit may issue a stop-work order halting the work until corrected. The order protects safety and ensures code compliance before work continues. It is an enforcement tool, not a payment or licensing remedy.

41. B — The floor area is 3,000 square feet: 75 feet multiplied by 40 feet. Area of a rectangle is length times width. This basic calculation underlies many estimating and code computations.

42. D — The Georgia general contractor trade exam is a proctored test that is generally open-book, allowing the use of approved reference materials. The format tests a candidate's ability to locate and apply code and reference information. Knowing it is open-book shapes effective exam preparation.

43. C — Naming the owner as an "additional insured" extends certain coverage of the contractor's liability policy to the owner. It protects the owner against covered claims arising from the contractor's work. It does not transfer the policy or replace the owner's own coverage.

44. A — Scaffolds must be erected, moved, dismantled, or altered under the supervision and direction of a competent person qualified in scaffolding. The competent person's oversight ensures the scaffold is built and modified safely. Improper assembly is a leading cause of scaffold collapse.

45. D — The final price is \$184,800: \$150,000 plus 12% overhead equals \$168,000, and adding 10% profit gives \$184,800. The markups are applied in sequence, not summed as a flat 22%, which would understate the price. Compounding correctly preserves the intended profit.

46. B — A Georgia claim of lien must be filed with the clerk of the superior court in the county where the property is located. Recording it there gives public notice and perfects the lien against the property. Filing in the wrong office leaves the lien ineffective.

47. A — A pneumatic fastening tool operating above the regulated pressure must have a safety device on the muzzle that prevents ejection of a fastener unless the muzzle is pressed against the work. This prevents accidental discharge that could injure the operator or bystanders. It is a fundamental power-tool safeguard.

48. C — Smoke alarms in a new dwelling must be installed in each sleeping room, outside each sleeping area, and on every level of the home. This placement ensures occupants are warned early wherever a fire starts. Comprehensive coverage is essential to life safety in residences.

49. D — The net profit margin is 4%: \$40,000 of net profit divided by \$1,000,000 in revenue. Net margin shows what fraction of each sales dollar remains as profit after all costs. It is a key gauge of overall business health.

50. B — A "mandatory" Georgia code applies statewide without the need for any local adoption. Permissive codes, by contrast, apply only where a local jurisdiction chooses to adopt them. Knowing which codes are mandatory tells a contractor what rules automatically apply everywhere in the state.