

C-10 (free sample) — Practice Questions

40 questions across every section · answer key on the last pages

Planning & Estimating

- 1. Using the optional multifamily method, a 20-unit apartment building applies a Table 220.84 demand factor of:**
 - A. 45 percent
 - B. 43 percent
 - C. 41 percent
 - D. 38 percent

- 2. Under that same demand-factor table, the portion of the combined general load from 3,001 VA to 120,000 VA is taken at what demand factor?**
 - A. 100 percent
 - B. 70 percent
 - C. 35 percent
 - D. 25 percent

- 3. An electric vehicle charger (EVSE) in a dwelling has a nameplate rating of 5760 VA. Under 220.57, the EVSE load used in the calculation is:**
 - A. 7200 VA
 - B. 5760 VA
 - C. 4320 VA
 - D. 9000 VA

- 4. A junction box contains 4 insulated 12 AWG conductors, 2 insulated 10 AWG conductors, and 2 equipment grounding conductors of 12 AWG, with no clamps and no device. What box volume does the fill calculation require?**
 - A. 16.25 cu in
 - B. 14.0 cu in
 - C. 15.75 cu in
 - D. 18.5 cu in

Rough Wiring

5. Under its scope section 725.1, Article 725 of the 2025 CEC covers:

- A. electric light and power circuits
- B. power-limited circuits, including power-limited remote-control and signaling circuits, that are not an integral part of a device or of utilization equipment
- C. services
- D. motors

6. Under 724.40, the power supplying Class 1 circuits is held to a limitation of:

- A. 100 volt-amperes
- B. 1000 volt-amperes
- C. 10,000 volt-amperes
- D. no limit

7. Unless otherwise permitted in the Code, Type MC cable shall be supported at intervals not exceeding:

- A. 10 ft
- B. 3 ft
- C. 6 ft
- D. 20 ft

8. Under 348.30(A), flexible metal conduit (FMC) shall be securely fastened in place within what distance of each box, cabinet, conduit body, or other conduit termination?

- A. 12 in.
- B. 18 in.
- C. 3 ft
- D. 6 ft

Finish Wiring & Trim**9. A 15/20 A receptacle in a WET location must have:**

- A. any standard cover
- B. an enclosure that is weatherproof whether or not the attachment plug cap is inserted
- C. no cover
- D. a metal blank plate

10. A receptacle assembly installed in a countertop surface must be:

- A. rated for at least 30 amperes
- B. listed for countertop applications
- C. a locking type
- D. installed without a faceplate

11. For dwelling units, the tamper-resistant receptacle requirement of CEC 406.12 also covers:

- A. only kitchens and bedrooms
- B. their attached and detached garages and accessory buildings
- C. only rooms used by children
- D. only outdoor receptacles

12. In a dwelling unit, a 15-ampere, 125-volt nonlocking-type receptacle installed in a wet location must be listed as:

- A. tamper-resistant only
- B. tamper-resistant and weather-resistant
- C. GFCI only, with no other listing
- D. no special listing

Startup, Troubleshooting & Maintenance

13. Using $I = E \div R$, a 240 V heating element with a resistance of 16 ohms draws a current of:

- A. 7.5 A
- B. 15 A
- C. 30 A
- D. 3,840 A

14. During startup you read the nameplate of a motor that has a built-in thermal protector. Under 430.7(A), a motor provided with a thermal protector complying with 430.32(A)(2) or (B)(2) shall be marked:

- A. "Overload exempt"
- B. "Thermally protected"
- C. "Self-resetting"
- D. "Heat limited"

15. A two-wire circuit has no equipment grounding conductor in the box, and you replace a non-grounding-type receptacle with a GFCI-type receptacle. Under 406.4(D)(2)(b), the receptacle or its cover plate shall be marked:

- A. "Grounded Outlet"
- B. "No Equipment Ground"
- C. "Isolated Ground"
- D. "Tested and Approved"

16. A 20 A branch-circuit conductor carries 24 A for hours because too many space heaters are plugged in, and there is no fault anywhere. Under Article 100, this is an overload, which is defined as operation of a conductor:

- A. In excess of its ampacity that, when it persists for a sufficient length of time, would cause damage or dangerous overheating
- B. Into a direct connection between two ungrounded conductors
- C. Into an unintentional connection to earth
- D. With a broken grounded conductor somewhere upstream

Safety

17. Under 2405.4, the written description of an employer's assured equipment grounding conductor program must be:

- A. Kept only at the main office
- B. Filed with the serving utility
- C. Available at the job site for inspection and copying
- D. Mailed to each worker's home

18. In Cal/OSHA (Title 8), the control of hazardous energy (lockout/tagout for servicing machinery) is primarily covered by section:

- A. 3314
- B. 250
- C. 110.26
- D. 690

19. Cal/OSHA section 2320.4(a) lists what the authorized person must do before working on de-energized electrical equipment. Item (1) on that list is:

- A. grounding every conductor
- B. notifying all involved personnel
- C. putting on arc-rated clothing
- D. testing for voltage

20. You have opened a feeder breaker but have not yet tested the conductors. Under 2320.3, until they are tested or otherwise proven de-energized, the conductors must be:

- A. Treated as energized
- B. Considered safe because the breaker is open
- C. Considered grounded by the open breaker
- D. Handled as if they were neutral conductors

Contracts & Change Orders

21. In addition to refunding the buyer's money within the 10-day window, the seller must also:

- A. Retain a 10% restocking fee
- B. Record a mechanics lien on the property
- C. Report the cancellation to the CSLB
- D. Cancel any security interest arising out of the transaction

22. After cancelling, where is the buyer required to make delivered goods available for the seller to reclaim?

- A. At the buyer's own address
- B. At the seller's warehouse
- C. At the nearest post office
- D. At the CSLB district office

23. If the seller does not demand the return of delivered goods within 20 days after the buyer cancels, the goods:

- A. Must be shipped to the seller at the buyer's expense
- B. Become the property of the buyer with no obligation to pay for them
- C. Must be discarded by the buyer
- D. Automatically revert to the manufacturer

24. Regarding the required formatting of a home improvement contract, the statute mandates that the general contract text be printed in a type size of at least:

- A. 8-point regular type
- B. 10-point type, with headings in 10-point boldface
- C. 6-point italic type
- D. There is no minimum type size

Bonds, Insurance & Licensing

25. The contractor license bond increased to its current amount effective:

- A. it never changed
- B. January 1, 2023
- C. 2010
- D. 2026

26. Which classification must carry workers' compensation insurance even with NO employees?

- A. C-10 electrical
- B. C-39 roofing
- C. C-36 plumbing
- D. none of them

27. On the contractor license bond, the total amount a surety must pay for employee wage and fringe-benefit claims is limited to an aggregate of:

- A. \$25,000
- B. \$4,000
- C. \$100,000
- D. an unlimited sum

28. Under the version of BPC 7125 that becomes operative on January 1, 2028, the no-employee exemption from the workers' compensation certificate requirement is limited to a licensee organized as:

- A. any sole owner with no employees
- B. a joint venture that has no employees
- C. a C-39 roofing contractor
- D. any corporation

Employment, Payroll & Safety

29. The version of BPC 7125 that limits the no-employee workers' compensation exemption to a joint venture with no employees becomes operative on:

- A. January 1, 2023
- B. January 1, 2026
- C. January 1, 2027
- D. January 1, 2028

30. On a project subject to skilled-and-trained-workforce requirements, what portion of the craft workforce must consist of skilled journeypersons or registered apprentices?

- A. About 25 percent of the workers
- B. Roughly half the workers
- C. Only the on-site supervisors
- D. all the workers in an apprenticeable occupation must be skilled journeypersons or apprentices registered in an approved program

31. Under the SB 96 "small project exemption," a construction job under \$25,000 (or maintenance under \$15,000) is relieved of DIR registration and electronic certified-payroll filing. What still applies?

- A. Nothing - exempt projects owe no prevailing wage
- B. Registration and eCPR filing are still required on every public works job regardless of value
- C. The exemption raises the prevailing wage threshold to \$100,000
- D. Prevailing wages must still be paid whenever the public works contract exceeds \$1,000

32. Under the skilled-and-trained-workforce rules, once fully phased in, what minimum share of the skilled journeyman hours on a covered project must be performed by graduates of a state-approved apprenticeship program?

- A. 10 percent
- B. 25 percent
- C. 60 percent
- D. 100 percent

Estimating, Bidding & Project Management

33. On California PUBLIC works projects, retention is generally capped at:

- A. 10 percent
- B. 5 percent
- C. 20 percent
- D. there is no cap

34. Effective January 1, 2026, California caps retention on PRIVATE construction contracts at:

- A. 10 percent
- B. 5 percent
- C. 0 percent
- D. 15 percent

35. In the CSLB law book's guidance on bidding, the instruction to "walk the job" means performing:

- A. an on-site inspection of the job
- B. a review of the owner's credit report
- C. a count of the crew's timecards
- D. a final punch-list walk after completion

36. Under California's Little Miller Act, a direct (prime) contractor on a public-works project must furnish a payment bond before starting work when the contract involves an expenditure in excess of:

- A. \$5,000
- B. \$500
- C. \$100,000
- D. \$25,000

Lien Law

37. Before filing a petition to release a lien that was not timely foreclosed, the owner must first:

- A. Pay the disputed amount into court in full
- B. Wait a full year from recording of the lien
- C. Give the claimant a demand to release the lien at least 10 days before filing
- D. Obtain a completed jury trial on the debt

38. Absent a notice of completion, a direct (prime) contractor must RECORD a mechanics lien within ____ of completion of the work:

- A. thirty days
- B. sixty days
- C. ninety days
- D. one year

39. An owner serves a written demand that a lower-tier claimant give the owner a stop payment notice. If that claimant fails to give either a bonded or unbonded stop notice, the claimant:

- A. is automatically awarded a mechanics lien
- B. forfeits its mechanics lien rights
- C. receives an extra 30 days to record a lien
- D. must post a 125% surety bond to preserve its claim

40. After a bonded stop notice, a construction lender that objects (within 20 days) to the sufficiency of the sureties gives the claimant a window to substitute a bond from an admitted surety insurer of:

- A. 5 days
- B. 10 days
- C. 20 days
- D. 30 days

Answer Key — C-10 (free sample)

Work the questions first, then check yourself here.

1. D — 38 percent

Table 220.84(B) gives 38 percent for 18-20 dwelling units. (CEC Table 220.84)

2. C — 35 percent

Table 220.45, dwelling units: the first 3000 VA at 100 percent, from 3001 to 120,000 VA at 35 percent, and the remainder over 120,000 VA at 25 percent. (CEC Table 220.45)

3. A — 7200 VA

220.57 calculates the EVSE load at either 7200 watts (volt-amperes) or the nameplate rating, whichever is larger. 7200 is larger than 5760, so 7200 VA is used. (CEC 220.57)

4. A — 16.25 cu in

Each insulated conductor counts at its own size: $(4 \times 2.25) + (2 \times 2.50) = 14.0$; the equipment grounding conductors add a single allowance based on the largest one (12 AWG) = 2.25 (314.16(B)(5)); total = 16.25 cu in. (CEC 314.16(B) + Table 314.16(B))

5. B — power-limited circuits, including power-limited remote-control and signaling circuits, that are not an integral part of a device or of utilization equipment

725.1 Scope: this article covers power-limited circuits, including power-limited remote-control and signaling circuits, that are not an integral part of a device or of utilization equipment. (CEC Article 725 (2023 rewrite) / Article 724 (Class 1))

6. B — 1000 volt-amperes

724.40 covers the supply of Class 1 circuits and refers to the 1000 volt-ampere limitation of 724.40. (CEC Article 724 (Class 1))

7. C — 6 ft

Under 330.30(C), unless otherwise permitted in the Code, Type MC cables shall be supported at intervals not exceeding 1.8 m (6 ft). (CEC 330.30)

8. A — 12 in.

348.30(A) requires FMC to be securely fastened in place by an approved means within 300 mm (12 in.) of each box, cabinet, conduit body, or other conduit termination. (CEC 348.30)

9. B — an enclosure that is weatherproof whether or not the attachment plug cap is inserted

Receptacles of 15 and 20 amperes, 125 and 250 volts, in a wet location must have an enclosure that is weatherproof whether or not the attachment plug cap is inserted. An outlet box hood used for this must be listed and identified as extra-duty (CEC 406.9(B)). (CEC 406.9(B)(1))

10. B — listed for countertop applications

Receptacle assemblies for installation in countertop surfaces must be listed for countertop applications (CEC 406.5(E)). (CEC 406.5(G)(1))

11. B — their attached and detached garages and accessory buildings

CEC 406.12(1) lists all dwelling units and boathouses, including their attached and detached garages, accessory buildings, and common areas. (CEC 406.12(1); 210.52(G))

12. B — tamper-resistant and weather-resistant

Dwelling-unit 15- and 20-ampere, 125- and 250-volt nonlocking-type receptacles must be listed tamper-resistant (CEC 406.12), and receptacles in wet locations must be listed and so identified as the weather-resistant type (CEC 406.9(B)). (CEC 406.12(1); 406.9(B)(1))

13. B — 15 A

$I = E \div R = 240 \text{ V} \div 16 \text{ ohms} = 15 \text{ A}$. (Arithmetic)

14. B — “Thermally protected”

430.7(A): a motor provided with a thermal protector complying with 430.32(A)(2) or (B)(2) shall be marked “thermally protected.” (CEC 430.7(A))

15. B — “No Equipment Ground”

406.4(D)(2)(b): a non-grounding-type receptacle may be replaced with a GFCI-type receptacle, and the receptacle or its cover plate shall be marked “No Equipment Ground.” (CEC 406.4(D)(2))

16. A — In excess of its ampacity that, when it persists for a sufficient length of time, would cause damage or dangerous overheating

Article 100 defines overload as operation of equipment in excess of normal full-load rating, or of a conductor in excess of its ampacity, that would cause damage or dangerous overheating if it persists for a sufficient length of time. (CEC Article 100)

17. C — Available at the job site for inspection and copying

2405.4: the written description of the program, including the employer's specific procedures, shall be available at the job site for inspection and copying by Cal/OSHA and any affected employee. (T8 2405.4)

18. A — 3314

Title 8 §3314 is the primary Cal/OSHA hazardous-energy control / LOTO rule for machinery servicing. (Cal/OSHA Title 8 §3314)

19. B — notifying all involved personnel

Before working on de-energized electrical equipment or systems, the authorized person is responsible for notifying all involved personnel, locking the disconnecting means open, tagging it, and blocking or dissipating hazardous stored energy; notifying all involved personnel is the first item on the list (Cal/OSHA 2320.4(a)). (NFPA 70E (electrically safe work condition))

20. A — Treated as energized

2320.3: all electrical equipment and systems shall be treated as energized until tested or otherwise proven to be de-energized. An open breaker alone does not prove it. (T8 2320.3)

21. D — Cancel any security interest arising out of the transaction

The Notice of Cancellation required by Civil Code 1689.7 tells the buyer that payments will be returned within 10 days following receipt by the seller of the cancellation notice, and any security interest arising out of the transaction will be canceled. (Civil Code §1689.7)

22. A — At the buyer's own address

The buyer need only tender the goods at the buyer's own address and is not obligated to tender them at any other place. (Civil Code §1689.11)

23. B — Become the property of the buyer with no obligation to pay for them

If the seller fails to demand possession of the goods within 20 days after cancellation, the goods become the property of the buyer without any obligation to pay for them. (Civil Code §1689.11)

24. B — 10-point type, with headings in 10-point boldface

BPC 7159: unless a larger typeface is specified, text in any printed form shall be in at least 10-point typeface and the headings shall be in at least 10-point boldface type. (B&P §7159)

25. B — January 1, 2023

The bond increased to \$25,000 effective January 1, 2023. (SB 607 (B&P §7071.6))

26. B — C-39 roofing

C-39 roofing contractors must maintain WC coverage even with no employees. (B&P (C-39 roofing WC rule))

27. B — \$4,000

BPC 7071.11(a): the aggregate liability of a surety on a claim for wages and fringe benefits brought against a bond required by the article, other than a bond required by Section 7071.8, shall not exceed four thousand dollars (\$4,000). (B&P §7071.11)

28. B — a joint venture that has no employees

BPC 7125, operative January 1, 2028, keeps the workers' compensation certificate as a condition of the license, and its exemption applies only to an applicant or licensee organized as a joint venture pursuant to Section 7029 that has no employees and files the required statement. (B&P Code §7125 (SB 216 / SB 1455))

29. D — January 1, 2028

BPC 7125, in the version whose exemption covers only a licensee organized as a joint venture under Section 7029 that has no employees, states: this section shall become operative on January 1, 2028. (SB 216 (2022) as amended by SB 1455 (2024))

30. D — all the workers in an apprenticeable occupation must be skilled journeypersons or apprentices registered in an approved program

Public Contract Code 2601(d)(1): a skilled and trained workforce means all the workers performing work in an apprenticeable occupation in the building and construction trades are either skilled journeypersons or apprentices registered in an approved apprenticeship program. (Public Contract Code 2601)

31. D — Prevailing wages must still be paid whenever the public works contract exceeds \$1,000

The small project exemption only waives registration and eCPR filing; the underlying duty to pay prevailing wages on public works over \$1,000 remains in force. (Labor Code 1725.5; 1771)

32. C — 60 percent

The graduation requirement phased up over several years to at least 60 percent of skilled journeyperson hours for work performed on or after January 1, 2020. (Public Contract Code 2601)

33. B — 5 percent

Public Contract Code 7201(b)(1): retention withheld from any payment on a public work shall not exceed 5 percent of the payment, and total retention shall not exceed 5 percent of the contract price. (CA Public Contract Code §7201)

34. B — 5 percent

Civil Code 8811 applies to private works contracts entered into on or after January 1, 2026: retention withheld from a payment shall not exceed 5 percent of the payment, and total retention shall not exceed 5 percent of the contract price. The section has exceptions (for example, when a required performance and payment bond is not furnished). (CA Civil Code §8811 (SB 61, eff. 1/1/2026))

35. A — an on-site inspection of the job

The CSLB law book says careful review of the job requires on-site inspection (walk the job), review of plans and specifications, identification of equipment required and the financing method, and the need for subcontractors. (CSLB Law Book p.64)

36. D — \$25,000

Civil Code §9550(a) requires a payment bond, given before commencement of work, on any public works contract involving an expenditure in excess of \$25,000. (CA Civil Code §9550)

37. C — Give the claimant a demand to release the lien at least 10 days before filing

Section 8482 bars an owner from petitioning for a release order unless, at least 10 days before filing, the owner gave the claimant notice demanding that the claimant execute and record a release of the lien. (CA Civil Code §8482)

38. C — ninety days

Civil Code 8412: a direct contractor must record a claim of lien before the earlier of ninety days after completion of the work of improvement, or sixty days after the owner records a notice of completion or cessation. (CA Civil Code §8412)

39. B — forfeits its mechanics lien rights

Section 8520(b) lets an owner demand a stop payment notice; a claimant who fails to give a bonded or unbonded stop payment notice in response forfeits the right to a lien under Chapter 4. (Civil Code §8520)

40. B — 10 days

Section 8534 gives the lender 20 days after the bonded notice to object to the sureties; once it objects, the claimant has 10 days after that objection to substitute a bond executed by an admitted surety insurer, or the lender may disregard the notice. (Civil Code §8534)