

Exam: 186083RR - Print Reading Applications

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Questions 1 to 20: Select the best answer to each question. Note that a question and its answers may be split across a page break, so be sure that you have seen the *entire* question and *all* the answers before choosing an answer.

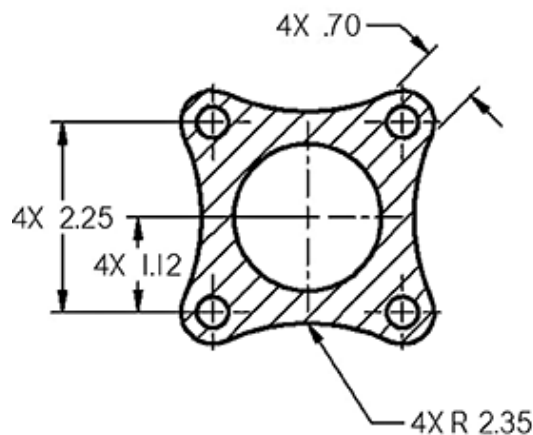
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1. Architectural prints for houses don't need to specify all details of a construction because

- A. installation instructions are often shipped with the material.
- B. it's impossible to predict how site conditions will affect construction requirements.
- C. final details aren't drawn until the building is completed and as-built drawings are produced by the construction manager.
- D. skilled contractors rely on their knowledge of construction methods and are responsible for the correct installation of materials according to the design intent of the print.



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2. In the figure above, the capital “R” refers to

- A. the radius of the indicated surface.
- B. the specified material type.
- C. this as a revolved section.
- D. the sheet from which this detail view was projected.

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3. An isometric view of a mechanical part is often included to

- A. show the difference between a first-angle and third-angle projection.
- B. give a full-scale representation of the part to the machinist.
- C. give inspectors the most important view of the part.
- D. give a general view of the part for information only.

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To answer the question below, click [here](#) and refer to the schematic found in Figure 5.

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4. In Figure 5, the staircase leading to the second floor is

- A. 3'-8" wide with a 6'-0" landing at the top.
- B. 1'-0" wide with a landing of 8'-8" at the top.
- C. only partially constructed.
- D. next to the restroom on the east side of the building.

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5. Section B-B from the drawing in Figure 5 is found

A. on Sheet 4 over the title “detail A”.

B. on Sheet B.

C. on Sheet A4.

D. on this sheet by looking in the direction of the arrow.

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To answer the question below, click [here](#) and refer to the schematic found in Figure 4.

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6. In Figure 4, how thick is the collar in the least material condition (LMC)?

A. 7.8 mm

B. 3.8 mm

C. 7.6 mm

D. 4.2 mm

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7. In Figure 4, the feature with a nominal diameter of 22.50

A. is a countersink that's 7.8 mm deep.

B. is for reference only.

C. appears four places on the print.

D. is a through-hole.

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To answer the question below, click [here](#) and refer to the schematic found in Figure 1.

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8. In Figure 1, the power unit most likely includes

A. only double-acting pumps.

B. a directional control valve and an actuator.

C. an electrical motor driving a unidirectional pump.

D. a reservoir and check valve.

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To answer the question below, click [here](#) and refer to the schematic found in Figure 2.

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9. Referring to the figure, how many florescent lights are located on the first floor?

A. 4

B. 0

C. 16

D. 18

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To answer the question below, click [here](#) and refer to the schematic found in Figure 3.

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10. In the right-hand view shown in Figure 3, notice the dimension that contains $2 \times 70.1/70.0$. In this case, the 2x means the

- A. dimension is actually 140/140.2 mm.
- B. dimension also applies to another location, in this case at the bottom of the part.
- C. dimension applies only between the two circular bosses at the top of the frame.
- D. detail is drawn at a 2:1 scale for clarity.

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11. Title block information on a drawing includes information such as

- A. applicable specifications, finishing notes, and file names.
- B. company name, assembly notes, welding notes, and finishing instructions.
- C. material specifications, drawing scale, and drawing number.
- D. drawing specifications, machining notes, welding notes, and material information.

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12. An architectural print sheet labeled E2 is likely to be

- A. some sort of schedule since all schedules are designated with an "E".
- B. an electrical print showing plans for installation of electrical equipment.

C. the second floor plan print in a series of working-drawing sheets.

D. an estimate of electrical work required for complete installation of the equipment.

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13. How many waterproof GFI receptacles are installed in the building shown in Figure 2?

A. 3

B. 34

C. 7

D. 6

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14. The distance from the top (as shown Figure 3) of the frame to the top of the center rib is

A. 108 mm.

B. 120 mm.

C. 72 mm.

D. impossible to determine from these drawings since a view is missing from this print.

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15. The drawing scale of an architectural print

- A. is usually $1/4" = 1'$ unless the sheet is for a site plan.
- B. can be as small as $1/8" = 1'$.
- C. is determined by the size of the material and the detail to be shown.
- D. shouldn't be linked to the actual size of the material being drawn.

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16. Cross-hatching on the drawing in the figure indicates concrete masonry units (CMUs) are used in the external walls of the two-story part of the building. What is the thickness of the CMU wall on the north side of the second floor in Figure 5?

- A. 6"
- B. 8"
- C. 12"
- D. 10"

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17. Referring to Figure 5, what is the width of the building in the north-south direction?

- A. 50'-0"
- B. 71'-9"

C. 43'-0"

D. 38'-0"

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18. The equipment represented by the schematic in Figure 1 uses _____ hydraulic cylinders.

A. four single-acting

B. two double-acting and one single-acting

C. three double-acting and one single-acting

D. four double-acting

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19. The growing use of the metric system for drawing dimensions is

A. due to the increasing requirements for global marketing of products.

B. now on the decline because U.S. companies are reluctant to adopt a foreign system.

C. because of the modern software being used to produce drawings.

D. a result of the metric (SI) system's ease of use and simplicity.

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20. The lack of HVAC system information on the print in Figure 5 indicates

- A.** that the building's designer has left the layout of HVAC components to the skilled contractor.
 - B.** that it's probably found on a sheet with an "M" designation.
 - C.** that the building is too simple to include an HVAC system.
 - D.** HVAC information is always contained on the sheet designated A1.
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End of exam