

# Blueprint Reading - PRE-TEST

**1-877-284-9941**

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Welcome to our **No Sweat Blueprint Reading Pre-Test.**  
**Click the PRINT button on your browser to print this test.**

The purpose of the No Sweat Blueprint Reading Pre-Test is to help determine your current understanding and working knowledge of blueprints.

The Pre-Test will help to uncover your areas of weakness so that appropriate training can be prescribed. Do not take an undue amount of time trying to "figure out" the correct answer. Typically, you will either know the answer, or you won't. If you do not know the answer, your natural instinct will be to "guess." In the long run, this will not help you. Simply pass over the question and go on to the next.

Finally, this test is not intended to either qualify or disqualify you for a particular job. It simply provides a starting point from which training can be prescribed.

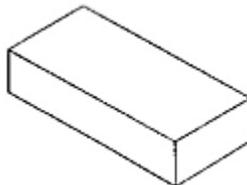
If you will be grading your own test, your instructor will provide you with the answer sheet when you're finished.

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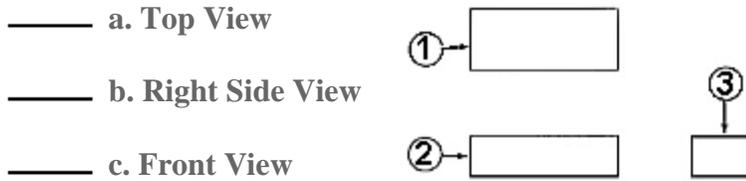
Unless otherwise instructed, place an "X" next to the answer that best completes the following questions or statements.

1. How many views or projections are possible on the simple box shown to the right below?

- a. 3
- b. 6
- c. 9



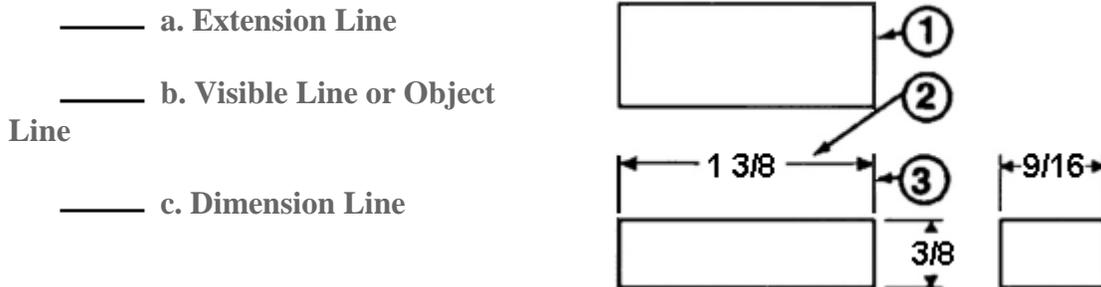
2. The projection shown at the right below has three views, numbered 1, 2, and 3. Match the view to its appropriate description:



3. A full, heavy line on a blueprint indicates a:

- a. Visible Line or Object Line  
 b. Centerline  
 c. Internal Thread

4. Match the numbers 1, 2, and 3 below with their appropriate descriptions:

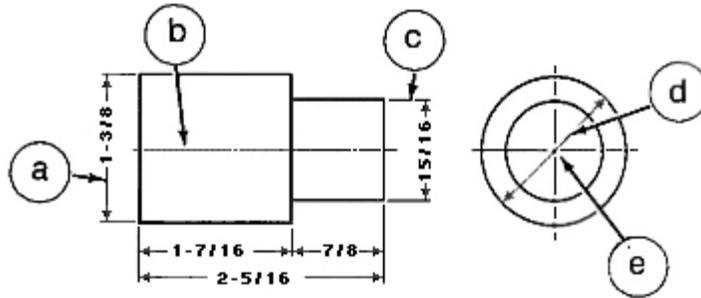


5. If the tolerance on your drawing is  $\pm .005$ , and the specified length of a part is 1.000, which of the following describes the acceptable lengths for the part?:

- a. 0.995-1.005  
 b. 1.005 only  
 c. 1.004-1.006

6. Write the names of the features or types of lines labelled at the right below:

- \_\_\_\_\_ a.
- \_\_\_\_\_ b.
- \_\_\_\_\_ c.
- \_\_\_\_\_ d.
- \_\_\_\_\_ e.

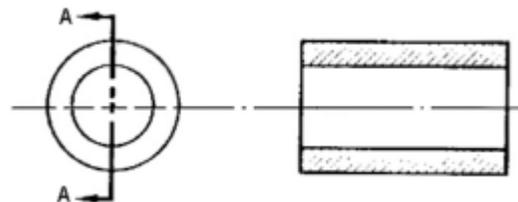


7. The scale,  $1/2 = 1$ , on a drawing means:

- \_\_\_\_\_ a.  $1/2$  of the drawing is equal to 1 part.
- \_\_\_\_\_ b. The part on the drawing is between  $1/2''$  and  $1''$  in size.
- \_\_\_\_\_ c. The actual part is twice as big as the drawing.

8. The drawing at right below shows a/an:

- \_\_\_\_\_ a. Internal thread
- \_\_\_\_\_ b. Full section view
- \_\_\_\_\_ c. Off-center diameter



9. Match the words listed on the left below with their appropriate definitions:

- |               |   |
|---------------|---|
| _____ Groove  | a. A uniform change in the diameter of a part along its length. |
| _____ Round   | b. A recess cut in the diameter of a part.                      |
| _____ Fillet  | c. A rounded corner of a part that curves outward.              |
| _____ Chamfer | d. A flattening of an outside corner of a part edge.            |
| _____ Taper   | e. A rounded inside corner of a part.                           |

10. Match the words listed on the left below with their appropriate definitions:

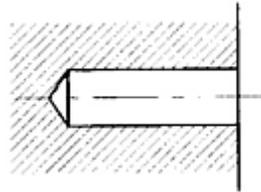
- Flat
  - Key
  - Boss
  - Slot
  - Pad
- a. Two of the most common types are "T" and dovetail.
  - b. Prevents relative motion between a shaft and a part.
  - c. A flat area cut on a shaft to provide a surface on which a set screw can rest.
  - d. A cylindrical projection used as a bearing surface to prevent rocking of parts.
  - e. Typically oval in shape, they are used as a bearing surface to prevent locking of parts.

11. A surface finish requirement is indicated by the following symbols:

- a.  $\sqrt{V}$  or  $63\sqrt{\frac{.002}{L}}$
- b.  $\pm$  or  $>$
- c.  $^\circ$ ,  $"$ , or  $'$

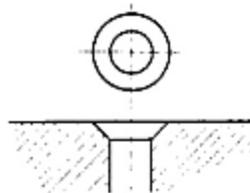
12. The drawing at the right below shows a:

- a. Threaded hole
- b. Countersunk hole
- c. Through hole
- d. None of the above



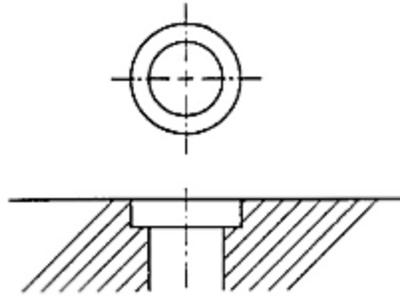
13. The drawing at the right below shows a:

- a. Counter sunk hole
- b. Tapped hole
- c. Spotfaced hole



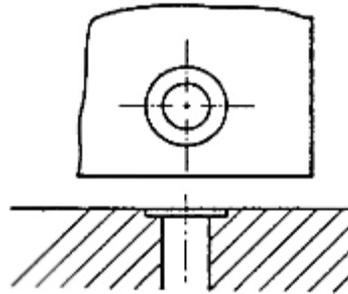
14. The drawing at the right below shows a:

- \_\_\_\_\_ a. Threaded hole
- \_\_\_\_\_ b. Countersunk hole
- \_\_\_\_\_ c. Counterbored hole
- \_\_\_\_\_ d. None of the above



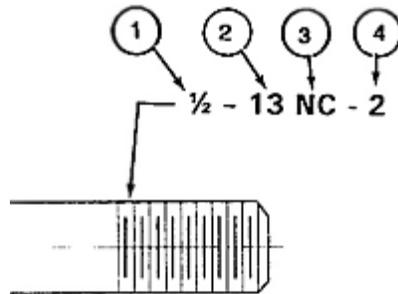
15. The drawing at the right below shows a:

- \_\_\_\_\_ a. Spotfaced hole
- \_\_\_\_\_ b. Countersunk hole
- \_\_\_\_\_ c. Counterbored hole
- \_\_\_\_\_ d. None of the above



16. Look at the thread callout at the right below. Then, next to each thread characteristic listed at left, write the numbers or letters in the thread callout that define it.

- \_\_\_\_\_ Major thread diameter
- \_\_\_\_\_ Thread
- \_\_\_\_\_ Class of fit
- \_\_\_\_\_ Thread pitch



**SCORE:**

**ANSWER KEY FOLLOWS**

Listed below are the answers to the *No Sweat Blueprint Reading Pre-Test* questions and the points earned by answering each question correctly. The total number of points that can be earned is 100

1. b (2 points)

2a. 1 (2 points)

2b. 3 (2 points)

2c. 2 (2 points)

3. a (2 points)

4a. 3 (3 points)

4b. 1 (3 points)

4c. 2 (3 points)

5. a (3 points)

6a. Dimension Line (3 point)

6b. Centerline (3 point)

6c. Extension Line (3 point)

6d. Diameter (3 point)

6e. Centerline (3 point)

7. c (3 points)

8. b (3 points)

9. b,c,e,d,a (3 points each,  
maximum 15 points)

10. c,b,d,a,e (3 points each,  
maximum 15 points)

11. a (3 points)

12. d (3 points)

13. a (3 points)

14. c (3 points)

15. a (3 points)

16. 1/2, NC, 2, 13 (3 points  
each, maximum 12 points)

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**Pre-Test courtesy of [www.NoSweatTraining.com](http://www.NoSweatTraining.com)**