## **Welding Symbol Examination**

Directions: Please answer the following questions (1-12) below by selecting the most correct answer. Each welding symbol is labeled with a letter which is located at the upper left hand corner of the outlined box. Please mark your answer on a Scantron 882-E.

1. Which of the following welding symbols below indicate a square joint?

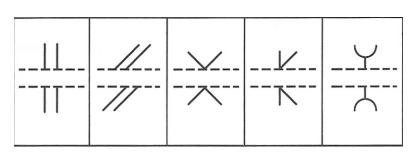
a.

b.

c.

d.

e.



2. Which of the following welding symbols below indicate a single V beveled joint?

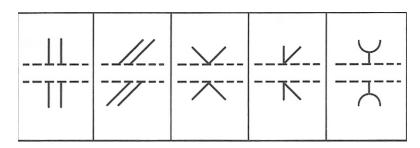
a.

b.

c.

d.

e.



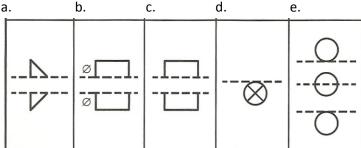
3. Which of the following welding symbols below indicate plug weld?

a.

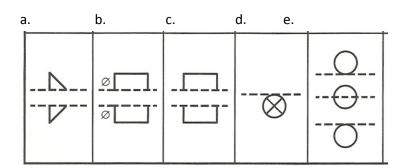
b.

d.

e.



4. Which of the following welding symbols below indicate a stud weld?



5. Which of the following welding symbols below indicate a fillet weld?

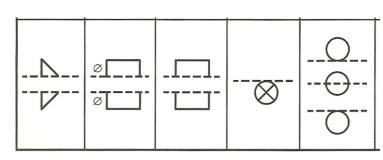
a.

b.

c.

d.

e.



6. Which of the following welding symbols indicate a melt-through weld?

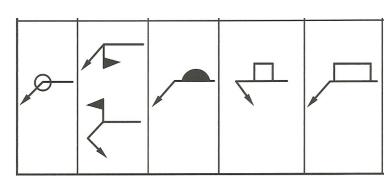
a.

b.

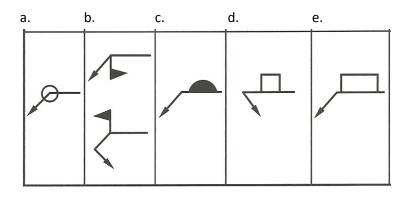
c.

d.

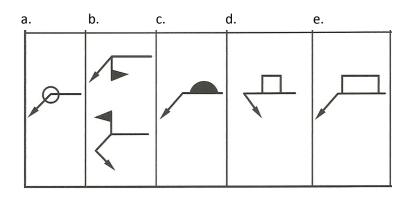
e.



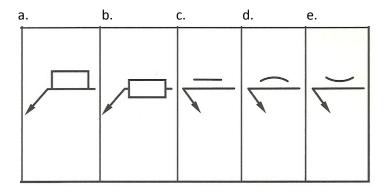
7. Which of the following welding symbols indicate a field weld?



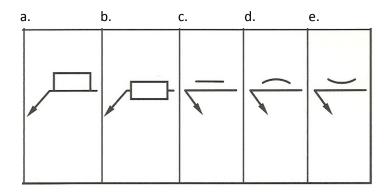
8. Which of the following welding symbols indicate a weld all around weld?



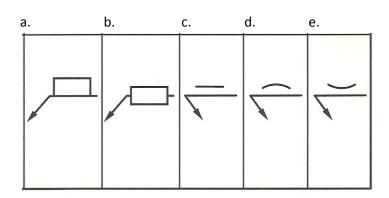
9. Which of the following welding symbols indicate a spacer?



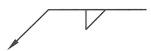
10. Which of the following welding symbols indicate a concave contour surface weld bead?



11. Which of the following welding symbols indicate a convex contour surface weld bead?



- 12. Identify the following welding symbol below:
  - a. Arrow side fillet weld
  - b. Other side fillet weld
  - c. Arrow side lap weld
  - d. Other side lap weld

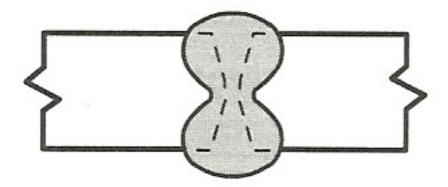


- 13. Identify the following welding symbol below:
  - a. Single V groove weld
  - b. Double V groove weld
  - c. Single V arrow side groove weld
  - d. Double V Other side groove weld



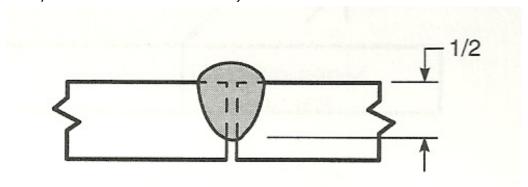
*Directions: Please select the most correct answer for the following welding joints (13-25).* 

14. Identify the correct weld cross section "joint" below:



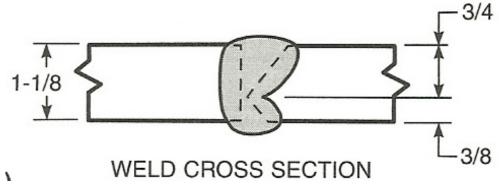
## WELD CROSS SECTION

- a. Single V
- b. Double V
- c. Square
- d. Double Flare
- 15. Identify the correct weld cross section "joint" below:

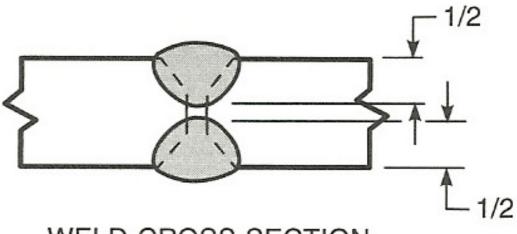


- a. A full penetration T Joint
- b. A full penetration square joint
- c. A partial penetration T joint
- d. A partial penetration square joint with ½" depth of penetration

16. Identify the correct weld cross section "joint" below:



- a. The weld joint above is a V groove type
- b. The weld joint above is a multiple angle beveled type
- c. The weld joint above is a partial penetration type
- d. The weld joint above is a full-penetration type
- e. Only b and d are correct
- 17. Identify the correct weld cross section "joint" below:



### WELD CROSS SECTION

- a. A single V groove weld joint
- b. A double V groove weld joint
- c. A weld joint with a bevel depth of ½"
- d. A weld joint with a taper depth of 1/4"
- 18. Identify the following welding symbol below:
  - a. Single bevel groove weld
  - b. Double bevel groove weld
  - c. Arrow side single bevel groove weld
  - d. Other side single bevel groove weld



#### 19. Identify the following welding symbol below:

- a. Single V groove weld
- b. Double V groove weld
- c. Triple V groove weld
- d. Quadruple V groove weld

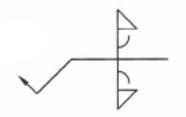
#### 20. Identify the following welding symbol below:

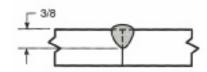
- a. Multipurpose weld symbol
- b. Combination weld symbol
- c. Flare groove weld symbol
- d. Fillet weld symbol
- e. None of the above are correct



- a. Square joint with a Field weld
- b. Square joint with 3/8" dept of penetration
- c. Square joint with a 3/8" land
- d. Out of position weld joint



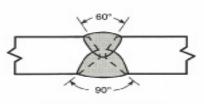




WELD CROSS SECTION

#### 22. Identify the following weld cross section:

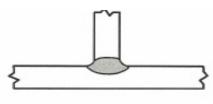
- a. Single v groove weld
- b. Double v groove weld
- c. Single lap joint
- d. T-Joint



WELD CROSS SECTION

#### 23. Identify the following weld cross section:

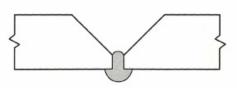
- a. Partial penetration joint
- b. Full penetration joint
- c. None of the above is correct
- d. Both a and b are correct



WELD CROSS SECTION

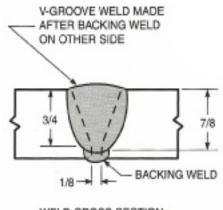
#### 24. Identify the following weld cross section:

- a. Non-consumable insert
- b. Consumable insert
- c. None of the above are correct
- d. Both a and b are correct



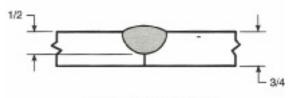
(B) JOINT GEOMETRY WITH INSERT IN PLACE

- 25. Identify the following weld cross section:
  - a. Single bevel groove weld
  - b. Double bevel groove weld
  - c. Single V groove weld with an 1/8" root opening
  - d. Double V groove weld with a 7/8" land



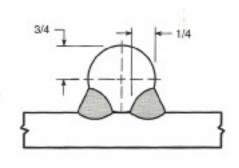
#### WELD CROSS SECTION

- 26. Identify the following weld cross section:
  - a. Single V groove weld
  - b. Single U groove weld
  - c. Square joint with ½" depth of fusion
  - d. Square joint with ¾" depth of fusion



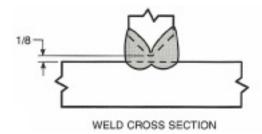
WELD CROSS SECTION

- 27. Identify the following weld cross section:
  - a. standard T joint
  - b. Standard rebar to plate connection
  - c. Standard round stock to plate connection
  - d. None of the above answers are correct
  - e. Either b or c are correct

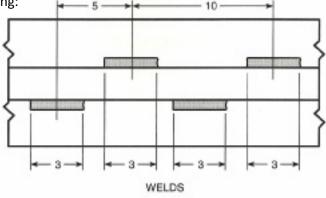


WELD CROSS SECTION

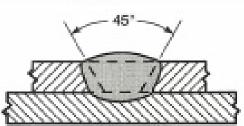
- 28. Identify the following weld cross section:
  - a. T-joint is partial penetration
  - b. T-joint is full penetration
  - c. Root opening is 1/8"
  - d. Root opening is 1/16"
  - e. Both b and c are correct



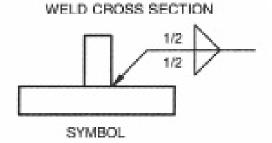
- 29. The following diagram indicates the following:
  - a. Staggered welds
  - b. Back to back welds
  - c. Opposed welds
  - d. 3" fillet welds (leg lengths)
  - e. weld bead with 10" centers



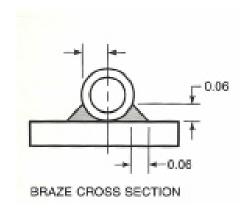
- 30. The following diagram indicates the following:
  - a. A V groove joint with an 45 degree included angle
  - b. A bevel angle of 22.5 degree's
  - c. A full penetration weld joint
  - d. All of the above are correct



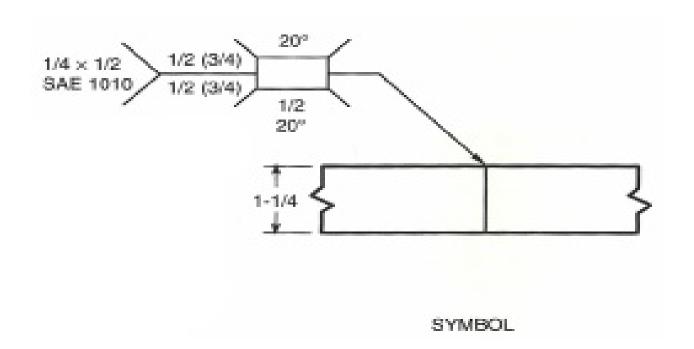
- 31. The following diagram indicates the following:
  - a. An arrow side fillet weld with 1/2" leg
  - b. A other side fillet weld with 1/2" leg
  - c. Both a and b are correct
  - d. Neither a or b are correct



- 32. The following diagram indicates the following:
  - a. A tolerance of six tenths
  - b. A tolerance of six hundredths
  - c. A tolerance of six thousandths
  - d. A tolerance of six hundred thousandths
  - e. A tolerance of six thousand thousandths



- 33. The following diagram indicates the following:
  - a. A double V groove weld with a SAE 1010 spacer
  - b. A single V groove weld with a SAE 1010 spacer
  - c. A square joint with an ASME 1010 spacer
  - d. A square joint with an ASME 1010 spacer



# THE END