

Unit 6: Working with Lines and Angles - Study Guide

1. List the unit objectives for this unit:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

INTRODUCTION

2. Describe a situation in your future career where lines, angles, or circles are used.

BASIC FIGURES

3. What four basic figures will be studied in this unit?

- a.
- b.
- c.
- d.

4. What does a point identify?

5. Do the problem indicated by the pencil icon on pages 4 and 5.

6. Explain the difference between a line and a line segment.

Rays and angles

7. On the bottom of page five, work the problem addressed in the text. (Do this problem on your figure in number 5.) What are the darkened parts of your lines called?

8. Define the vertex of an angle.

9. Explain how to name each of the following:

a. Point _____

b. Line _____

c. Line segment _____

d. Ray _____

e. Angle _____

10. Do the problems shown at the bottom of page 6 and top of page 7.

3. _____

4. _____

5. _____

7. _____

8. _____

Circles

11. Follow the instruction indicated by the pencil icon on page 7 to draw a circle similar to the one shown by the key icon.

12. What is the radius of a circle?

13. What is true about all radii of the same circle?

14. Use the figure you drew in question #11 to answer the questions addressed in the text at the bottom of page 7.

15. What is the diameter of a circle?

16. What is the relationship between the radius and the diameter of a circle?

17. What is the circumference of a circle?

18. Do the Study Activity on page 8.

1. _____
2. _____
3. _____
4. _____
5. _____

DRAWING AND MEASURING LINE SEGMENTS

19. Do the Study Activity on page 9.

1. _____
2. _____
3. _____
5. _____
6. _____
7. _____

DRAWING AND MEASURING ANGLES

20. How many degrees are in a full circle?

21. What is an angle of 180° called?

22. What is one of the most common angles you work with on the job called?

23. Do the Study Activity on page 14. (you may have to measure it yourself)

1 a) _____

2 a) _____

1 b) _____

2 b) _____

1 c) _____

2 c) _____

24. Do the Study Activity on page 15.

25. Do Study Activity on page 16 (#1-3)

PERPENDICULAR AND PARALLEL LINES

26. What are perpendicular lines? Draw an example of some.

27. Do the Study Activity shown at the bottom of page 18 and top of page 19.

- 1. _____
- 2a. _____
- 2b. _____
- 2c. _____
- 2d. _____
- 2e. _____

28. Do the Study Activity shown at the bottom of page 19 and top of page 20.

Parallel Lines

29. What are parallel line?

DRAWING FIGURES ON THE JOB

30. Do the Study Activity on page. 23.

1. _____
2. _____
3. _____
4. _____

SUMMARY

31. What does the word “geometry” mean?

32. Carefully review the summary, and write below any questions you have about this unit. If you have no questions, sign your name to indicate you have read the summary.