### Introduction

1. "Anything that begins with (x3)
   
   `gl` is part of _______________________.
   
   `glu` is part of the _______________________.
   
   `glut` is part of _______________________."

2. "glut is a _____________________ structure."

### Drawing

3. "OpenGL does two things: you either _______________
   something or you set _______________."

4. "The really crucial one is this one called `glutDisplayFunc`
   and glut will call that one whenever the window needs to
   be _______________________."

5. What `GL_primitive` do you typically use to draw a circle?

6. What two statements do you put vertices in-between?

   ______________________
   ______________________

7. Flat shading you can see _______________, where
   smooth shading you cannot.

8. "To improve performance, you want to _____________
   state as little as possible."

9. "There are four components of color, `RGB` and _______
   which controls transparency."

10. Three ways to set OpenGL state are

    ______________________
11. Run Shapes.exe and explore the GL primitives, now.

**Animation & Depth Buffering**

12. The Z buffer is the __________ buffer.

13. Clear color buffer makes all the pixels equal to the ____________________________

14. The Depth buffer stores _____________ information.

15. “Your eye looks along the - ____ axis.”

16. Depth testing is usually enabled in the ______________ routine.

**Xforms**

17. “... eye space at the _______________ looking down the –z axis.”

18. “Viewing frusta, anything inside of there you got to _______________; anything outside you don't.”

19. “Projection transformations adjust the ____________________________.”

20. “Viewing transformation..., where you, the camera, get to _______________.”

21. Modeling transformations ________________.

22. “Viewport transformations control the final mapping of the ____________________________.”

23. “Modelview controls the position of the ______________

   and the position of the ______________.”

24. The steps in forming an image are:
   1. ____________________________
   2. ____________________________
3. __________________________________________
4. __________________________________________

25. "The initial matrix mode for OpenGL will be
    _______________________."

26. "If you want to manipulate the matrix stack, use
    ________________________ and
    ________________________.”

27. “glPushMatrix makes a ______ and pushes it on the
    stack and glPopMatrix throws _______________.”

28. "There are two types of projection transformations:
    ___________________ projection and
    ___________________ projection.”

29. [Assuming Perspective projection] you want zNear __ 0,
    and zFar _______ than zNear.

30. “Aspect ratio is the ratio of the __________ of
    something to the __________ of something.”

31. “gluOrtho2D calls glOrtho with z = __________.”