

Please PRINT your name _____

No calculators, cell phones, computers, notes, etc.

Circle your answer. Make your work correct, complete and coherent.

The quiz is worth 5 points. The solutions will be posted on my website later today.

Quiz 9, October 2, 2019

Which of the following pictures is the graph of

$$9x^2 + 4y^2 + 2z^2 = 36.$$

ANSWER: Each cross section (when $x = 0$, when $y = 0$, and when $z = 0$ is an ellipse. The graph is an ellipsoid. It is either (c) or (d). Our graph includes the points $(2, 0, 0)$, $(0, 3, 0)$, and $(0, 0, \sqrt{18})$. So our graph is small in the x -direction but large in the z -direction. Our graph must be (c) rather than (d).

