

## Answer on Question #46876 – Math – Analytic Geometry

Graph the ellipse with equation  $x^2$  divided by forty nine plus  $y^2$  divided by thirty six = 1

**Solution:**

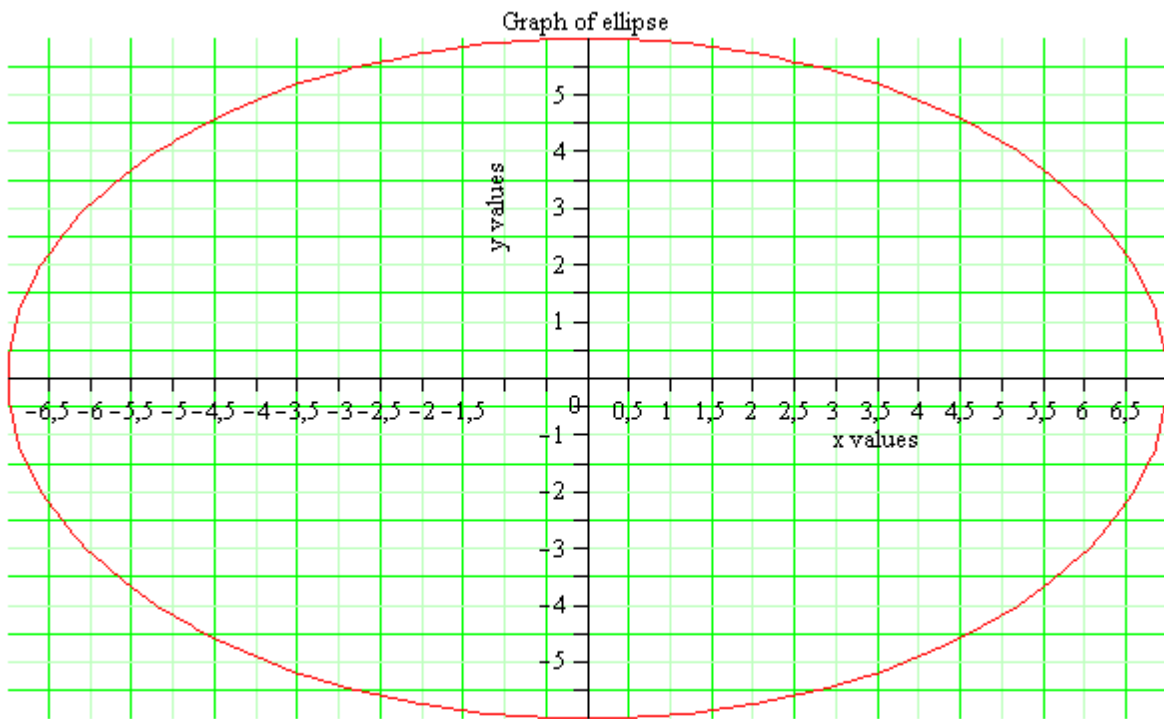
Graph the ellipse with equation:

$$\frac{x^2}{49} + \frac{y^2}{36} = 1$$

Ellipse has vertices in points  $(-7;0)$ ,  $(7;0)$ ,  $(0, -6)$ ,  $(0, 6)$ .

Ellipse was drawn using MAPLE 15:

```
implicitplot( $\frac{x^2}{49} + \frac{y^2}{36} = 1$ ,  $x = -10..10$ ,  $y = -10..10$ , title
= "Graph of ellipse", axis = [gridlines = [30, colour = green,
majorlines = 2]], caption = typeset("A plot of ",  $\frac{x^2}{49} + \frac{y^2}{36} = 1$ ,
"."), axes = normal, labels = ["x values", "y values"],
labeldirections = [horizontal, vertical])
```



A plot of  $\frac{1}{49}x^2 + \frac{1}{36}y^2 = 1$ .