

Equations of Ellipses - Matching Worksheet

Write the letter of the equation that matches the description of the ellipse.

____ 1. This ellipse has vertices at (0,-11) and (0,11) and foci at(0,-9) and (0,9).

a.
$$\frac{x^2}{(\sqrt{120})^2} + \frac{y^2}{(13)^2} = 1$$

____ 2. This ellipse has vertices at (0,-12) and (0,12) and foci at(0,-8) and (0,8).

b.
$$\frac{x^2}{(\sqrt{320})^2} + \frac{y^2}{(18)^2} = 1$$

____ 3. This ellipse has vertices at (0,-13) and (0,13) and foci at(0,-7) and (0,7).

c.
$$\frac{x^2}{(\sqrt{40})^2} + \frac{y^2}{(11)^2} = 1$$

____ 4. Find the equations of an ellipse(in standard, form) that has vertices at (0,-14) and (0,14) and foci at(0,-6) and (0,6).

d.
$$\frac{x^2}{(\sqrt{240})^2} + \frac{y^2}{(16)^2} = 1$$

____ 5. This ellipse has vertices at (0,-15) and (0,15) and foci at(0,-5) and (0,5).

e.
$$\frac{x^2}{(\sqrt{160})^2} + \frac{y^2}{(14)^2} = 1$$

____ 6. This ellipse has vertices at (0,-16) and (0,16) and foci at (0,-4) and (0,4).

f.
$$\frac{x^2}{(\sqrt{280})^2} + \frac{y^2}{(17)^2} = 1$$

____ 7. This ellipse has vertices at (0,-17) and (0,17) and foci at (0,-3) and (0,3).

g.
$$\frac{x^2}{(\sqrt{200})^2} + \frac{y^2}{(15)^2} = 1$$

____ 8. This ellipse has vertices at (0,-18) and (0,18) and foci at (0,-2) and (0,2).

h.
$$\frac{x^2}{(\sqrt{80})^2} + \frac{y^2}{(12)^2} = 1$$

