$\qquad$

1. Find the foci of the ellipse.

[A] $(0, \pm 8.5)$
$[\mathrm{B}]( \pm 7.4,0)$
$[\mathrm{C}]( \pm 8.5,0)$
$[\mathrm{D}](0, \pm 7.4)$
2. Write an equation in standard form for the ellipse with foci $(6,0)$ and $(-6,0)$ and $y$-intercepts of 6 and -6 .
3. Write the equation of two different ellipses that have foci at $(-8,0)$ and $(8,0)$.
4. Find the foci of the ellipse with equation $100 x^{2}+9 y^{2}=900$.
5. Find the foci of the ellipse with equation $9 x^{2}+36 y^{2}=324$.
[A] $( \pm 5.2,0)$
[B] $(0, \pm 5.2)$
$[C]( \pm 6.7,0)$
[D] $(0, \pm 6.7)$
6. Which is a focus of $\frac{x^{2}}{64}+\frac{y^{2}}{49}=1$ ?
[A] $(3.9,0)$
$[\mathrm{B}](-7,0)$
[C] $(0,13)$
[D] $(0,8)$
7. Compare the quantity in Column A with the quantity in Column B.
$\frac{x^{2}}{a^{2}}+\frac{y^{2}}{b^{2}}=1 ;$ foci are $(-c, 0),(c, 0)$
Column A Column B
$a \quad b$
[A] The quantity in Column $A$ is greater. [B] The quantity in Column $B$ is greater.
[C] The two quantities are equal.
[D] The relationship cannot be determined on the basis of the information supplied.
[1] B
[2] $\frac{x^{2}}{72}+\frac{y^{2}}{36}=1$
[3] Answers may vary. Sample: $\frac{x^{2}}{289}+\frac{y^{2}}{225}=1 ; \frac{x^{2}}{100}+\frac{y^{2}}{36}=1$
[4] ( $0, \pm 9.5$ )
[5] A
[6] A
[7] A
