

## Writing Equations of Ellipses

Use the information provided to write the standard form equation of each ellipse.

1) Vertices:  $(8, 9)$ ,  $(-20, 9)$   
Co-vertices:  $(-6, 20)$ ,  $(-6, -2)$

2) Vertices:  $(5, -5)$ ,  $(-21, -5)$   
Co-vertices:  $(-8, 4)$ ,  $(-8, -14)$

3) Vertices:  $(-8, 15)$ ,  $(-8, -3)$   
Co-vertices:  $(-1, 6)$ ,  $(-15, 6)$

4) Vertices:  $(2, 3)$ ,  $(2, -19)$   
Co-vertices:  $(10, -8)$ ,  $(-6, -8)$

5) Vertices:  $(-7, 9), (-7, -1)$   
Foci:  $(-7, 8), (-7, 0)$

6) Vertices:  $(4, 3), (4, -7)$   
Foci:  $(4, 1), (4, -5)$

7) Vertices:  $(-5, 14), (-5, -12)$   
Foci:  $(-5, 13), (-5, -11)$

8) Vertices:  $(20, 8), (-6, 8)$   
Foci:  $(12, 8), (2, 8)$