

Pre Calculus 10 2 10 3 Ellipses and Hyperbolas

Lesson 215 | Precalculus | Conic sections

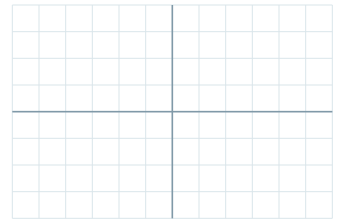
https://www.youtube.com/watch?v=dzYvrP9_P6E

Original practice aligned to the saved video title.

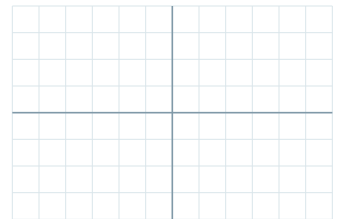
Name: _____ Date: _____ Show your reasoning.

01

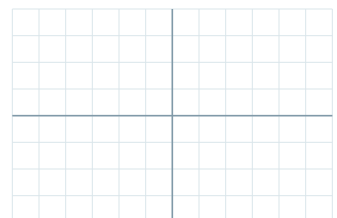
For $(x-(-4))^2/196 + (y-4)^2/144 = 1$, find the center, vertices, co-vertices, and foci; sketch.

**02**

For $(x-(3))^2/169 + (y-4)^2/100 = 1$, find the center, vertices, co-vertices, and foci; sketch.

**03**

For $(x-(-2))^2/169 + (y-11)^2/64 = 1$, find the center, vertices, co-vertices, and foci; sketch.



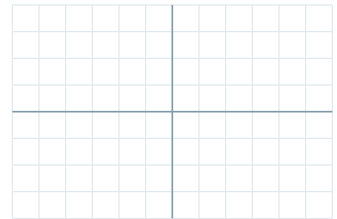
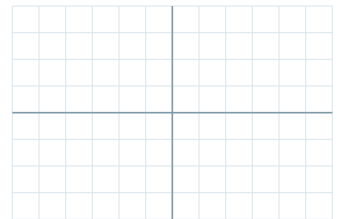
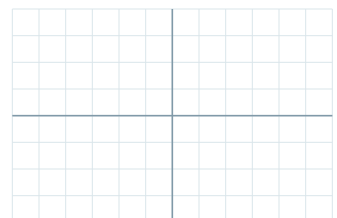
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04For $(x-(-9))^2/81 + (y-7)^2/16 = 1$, find the center, vertices, co-vertices, and foci; sketch.**05**For $(x-(-8))^2/49 + (y-8)^2/16 = 1$, find the center, vertices, co-vertices, and foci; sketch.**06**For $(x-(-7))^2/144 + (y-6)^2/9 = 1$, find the center, vertices, co-vertices, and foci; sketch.

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01

For $(x-(-4))^2/196 + (y-4)^2/144 = 1$, find the center, vertices, co-vertices, and foci; sketch.

Center $(-4,4)$; horizontal semimajor axis 14, semiminor axis 12. Vertices $(-18,4),(10,4)$; co-vertices $(-4,-8),(-4,16)$; foci $(-4 \pm \sqrt{52},4)$.

02

For $(x-(3))^2/169 + (y-4)^2/100 = 1$, find the center, vertices, co-vertices, and foci; sketch.

Center $(3,4)$; horizontal semimajor axis 13, semiminor axis 10. Vertices $(-10,4),(16,4)$; co-vertices $(3,-6),(3,14)$; foci $(3 \pm \sqrt{69},4)$.

03

For $(x-(-2))^2/169 + (y-11)^2/64 = 1$, find the center, vertices, co-vertices, and foci; sketch.

Center $(-2,11)$; horizontal semimajor axis 13, semiminor axis 8. Vertices $(-15,11),(11,11)$; co-vertices $(-2,3),(-2,19)$; foci $(-2 \pm \sqrt{105},11)$.

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04

For $(x-(-9))^2/81 + (y-7)^2/16 = 1$, find the center, vertices, co-vertices, and foci; sketch.

Center $(-9,7)$; horizontal semimajor axis 9, semiminor axis 4. Vertices $(-18,7),(0,7)$; co-vertices $(-9,3),(-9,11)$; foci $(-9 \pm \sqrt{65},7)$.

05

For $(x-(-8))^2/49 + (y-8)^2/16 = 1$, find the center, vertices, co-vertices, and foci; sketch.

Center $(-8,8)$; horizontal semimajor axis 7, semiminor axis 4. Vertices $(-15,8),(-1,8)$; co-vertices $(-8,4),(-8,12)$; foci $(-8 \pm \sqrt{33},8)$.

06

For $(x-(-7))^2/144 + (y-6)^2/9 = 1$, find the center, vertices, co-vertices, and foci; sketch.

Center $(-7,6)$; horizontal semimajor axis 12, semiminor axis 3. Vertices $(-19,6),(5,6)$; co-vertices $(-7,3),(-7,9)$; foci $(-7 \pm \sqrt{135},6)$.