

Math Sheet

Name _____ Score _____ / 16 Teacher _____ Date _____

Classifying Conic Sections

Classify each equation. The selected equation mode applies to this section.

1. $\frac{(x-5)^2}{9} + \frac{(y+2)^2}{36} = 1$

Type: _____

2. $(x-5)^2 + (y-4)^2 = 36$

Type: _____

3. $y = 6 \cdot (x+3)^2 + 2$

Type: _____

4. $\frac{(y-2)^2}{9} - \frac{(x-1)^2}{36} = 1$

Type: _____

5. $\frac{(x+3)^2}{25} + \frac{(y-4)^2}{16} = 1$

Type: _____

6. $(x+5)^2 + (y+4)^2 = 25$

Type: _____

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Classifying Conic Sections

Classify each general equation and write it in standard form.

7. $-12x^2 - 3y^2 + 72x + 24y - 144 = 0$

Type: _____ Standard form: _____

8. $-x^2 - y^2 + 6x + 6y - 2 = 0$

Type: _____ Standard form: _____

9. $-32x^2 + 2y^2 + 192x - 8y - 248 = 0$

Type: _____ Standard form: _____

10. $6y^2 + 2x - 24y + 32 = 0$

Type: _____ Standard form: _____

11. $-72x^2 - 50y^2 - 288x - 200y + 1312 = 0$

Type: _____ Standard form: _____

12. $2x^2 + 2y^2 - 50 = 0$

Type: _____ Standard form: _____

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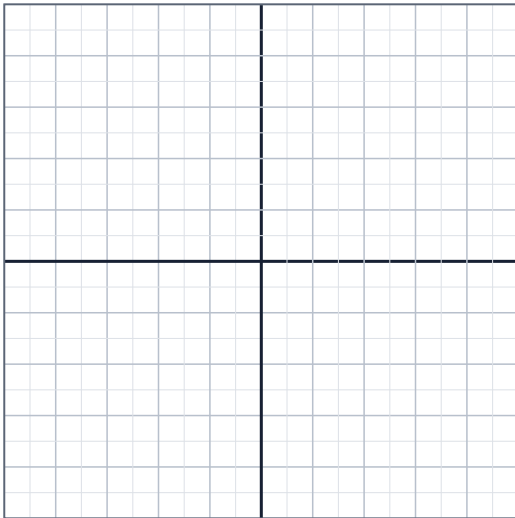
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Classifying Conic Sections

Classify, write standard form, graph and give the named features. Each grid square is 1 unit.

13. $50 \cdot x^2 + 8 \cdot y^2 - 200 \cdot x - 32 \cdot y + 32 = 0$

Standard form: _____



Each square = 1 unit

Type: _____

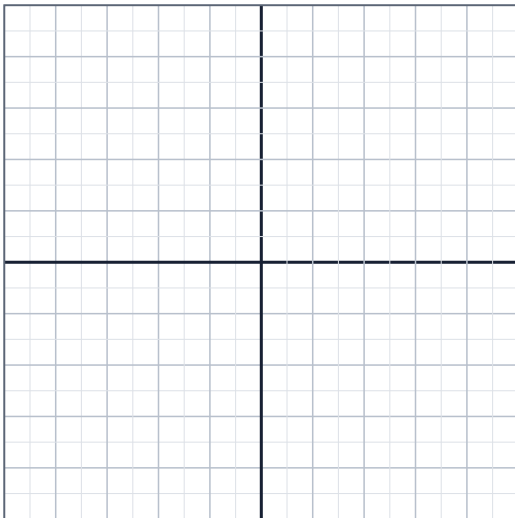
Center: _____

Vertices: _____

Foci: _____

14. $4 \cdot y^2 - 1 \cdot x + 8 \cdot y + 3 = 0$

Standard form: _____



Each square = 1 unit

Type: _____

Vertex: _____

Focus: _____

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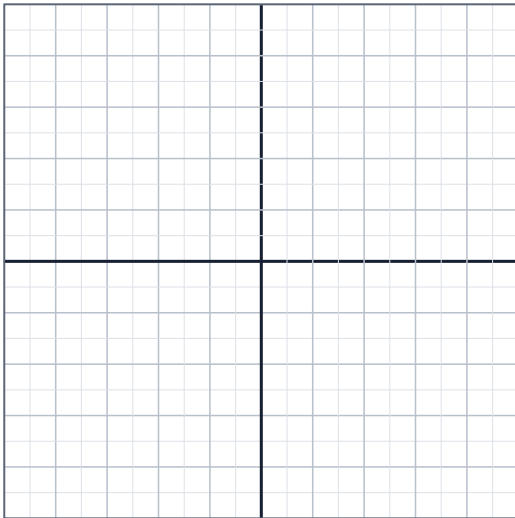
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Classifying Conic Sections

Classify, write standard form, graph and give the named features. Each grid square is 1 unit.

15. $2 \cdot x^2 + 2 \cdot y^2 + 4 \cdot x + 8 \cdot y + 2 = 0$

Standard form: _____



Each square = 1 unit

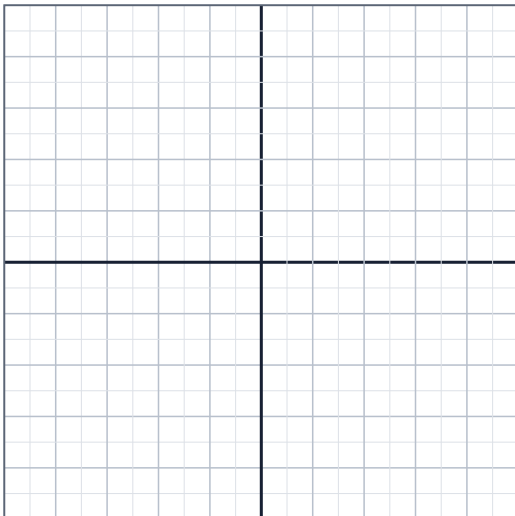
Type: _____

Center: _____

Radius: _____

16. $8 \cdot x^2 - 8 \cdot y^2 + 32 \cdot x - 16 \cdot y + 56 = 0$

Standard form: _____



Each square = 1 unit

Type: _____

Center: _____

Vertices: _____

Foci: _____