

Identifying & Graphing CONIC SECTIONS

STATIONS ACTIVITY

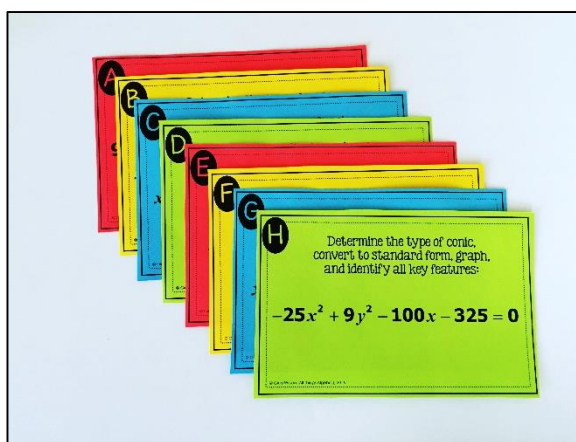


Identifying & Graphing CONIC SECTIONS

Objective: To practice identifying conic sections, convert to standard form, and identify all key characteristics. This includes circles, ellipses, hyperbolas, and parabolas. All conics are given in general conic form, so students must convert to standard form by completing the square. Key characteristics include center, radius, vertices, covertices, asymptotes, vertex, directrix, and focus.

Activity Directions:

1) Print the 8 station cards and post around the room. I print mine on colored paper and laminate them.



2) Distribute the "Conic Sections Station Activity" worksheet to each student. Place students into groups of 3-4 and assign them to a starting problem. I typically set the clock for about 5 minutes (longer if needed). First students must determine which conic section the equation represents. They go to this place on the worksheet and place the station letter in the circle. Then they convert the equation to standard form, graph, and identify all key characteristics. When the alarm goes off, they move to the next station. After they have completed the activity, we discuss the answers as a group. *This can also be used as a task card activity in which students complete in their seats.

CONIC SECTIONS Stations Activity Name: _____ Date: _____ Per: _____

CIRCLES

ELLIPSES

HYPERBOLAS

PARABOLAS

Standard Form: _____
Vertex: _____
Axis of Symmetry: _____
Focus: _____
Directrix: _____

Standard Form: _____
Vertex: _____
Axis of Symmetry: _____
Focus: _____
Directrix: _____