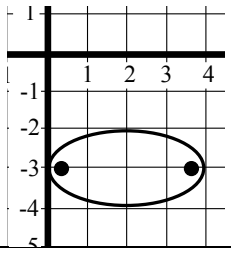
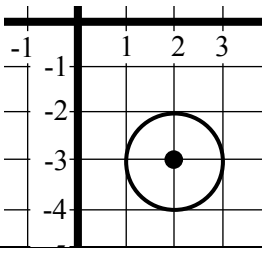
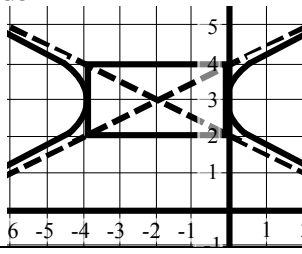
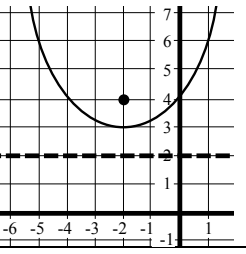
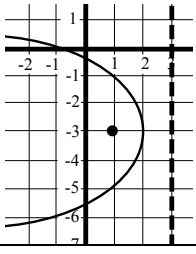
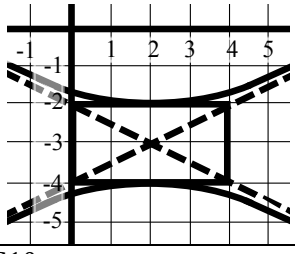
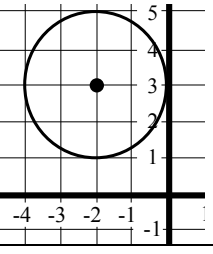
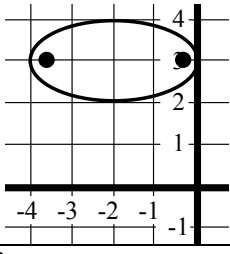
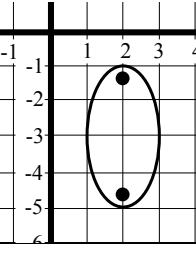
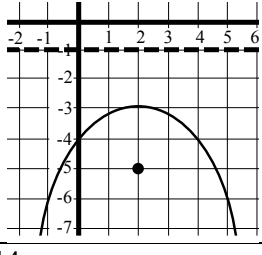
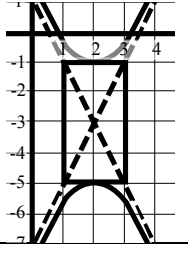
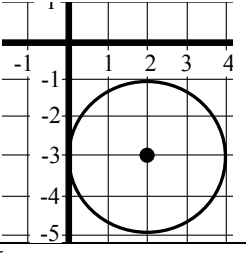
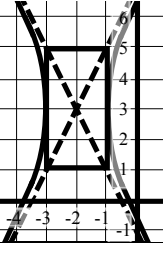
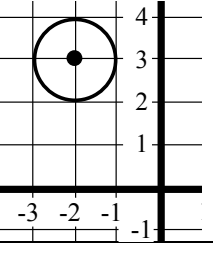
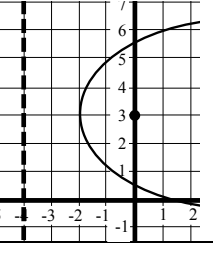
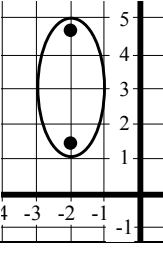


Name: _____

Connecting the Equation to the Graph of a Conic

An equation and a graph are simply two different ways of representing the same conic. If you can identify the center (h, k) , and the distances $(a, b, p, \text{ and } r)$, on the graph and the equation, then you can match the equation to its graph. **Identify (h, k) , $a, b, p,$ and r (optional: use the table on the back of this page). Use that information to identify which equation matches which graph (either in the chart at the bottom, or on the back table).**

E1. $\frac{(x+2)^2}{4} + \frac{(y-3)^2}{1} = 1$	E2. $x+2 = \frac{1}{8}(y-3)^2$	E3. $(x+2)^2 + (y-3)^2 = 4$	E4. $\frac{(x+2)^2}{4} - \frac{(y-3)^2}{1} = 1$
E5. $x-2 = -\frac{1}{4}(y+3)^2$	E6. $\frac{(y+3)^2}{1} - \frac{(x-2)^2}{4} = 1$	E7. $\frac{(x-2)^2}{4} + \frac{(y+3)^2}{1} = 1$	E8. $(x-2)^2 + (y+3)^2 = 1$
E9. $(x-2)^2 + (y+3)^2 = 4$	E10. $\frac{(x-2)^2}{1} + \frac{(y+3)^2}{4} = 1$	E11. $4(y-3) = (x+2)^2$	E12. $\frac{(y+3)^2}{4} - \frac{(x-2)^2}{1} = 1$
E13. $(x+2)^2 + (y-3)^2 = 1$	E14. $-8(y+3) = (x-2)^2$	E15. $\frac{(x+2)^2}{1} - \frac{(y-3)^2}{4} = 1$	E16. $\frac{(x+2)^2}{1} + \frac{(y-3)^2}{4} = 1$
G1. 	G2. 	G3. 	G4. 
G5. 	G6. 	G7. 	G8. 
G9. 	G10. 	G11. 	G12. 
G13. 	G14. 	G15. 	G16. 

The matches are...

E1 & G_____	E2 & G_____	E3 & G_____	E4 & G_____	E5 & G_____	E6 & G_____	E7 & G_____	E8 & G_____
E9 & G_____	E10 & G_____	E11 & G_____	E12 & G_____	E13 & G_____	E14 & G_____	E15 & G_____	E16 & G_____

