Name _____ Date _____

Finding the Equation of a Parabola - Matching Worksheet

Match the description of the parabola to its equation.

_____ 1. If the focus of a parabola is (-0.4, -9.25) and the directrix is y=-9.15.

a. $y = -2x^2 + 3x + 4$

_____ 2. If the focus of a parabola is (-0.25, -5) and the directrix is y=-4.75.

b. $y = x^2 + 8x + 2$

_____ 3. If the focus of a parabola is (-1, 0.75) and the directrix is y=1.25.

c. $y = 2x^2 + x + 2$

_____ 4. If the focus of a parabola is (0.75, 5) and the directrix is y=5.25.

d. $y = -5x^2 - 4x - 10$

_____ 5. If the focus of a parabola is (0.2, 4.15) and the directrix is y=4.25.

e. $y = x^2 + 2x + 3$

_____ 6. If the focus of a parabola is (-4, -13.75) and the directrix is y=-14.25.

f. $y = x^2 + 2x + 11$

_____ 7. If the focus of a parabola is (-1, 10.25) and the directrix is y=9.75.

g. $y = -2x^2 - x - 5$

_____ 8. If the focus of a parabola is (-0.25, 11) and the directrix is y=10.75.

h. $y = -5x^2 + 2x + 4$

_____ 9. If the focus of a parabola is (-1, 2.25) and the directrix is y=1.75.

i. $y = -2x^2 + x + 11$

_____ 10. If the focus of a parabola is (-0.25, 2) and the directrix is y=1.75.

j. $y = -x^2 - 2x + 0$