MORE PRACTICE: Graphing Conics

Determine which equation matches which graph.

1 a. $9x^2 + 72x - 16y^2 - 96y - 144 = 0$

2 b. $4x^2 + 48x + 25y^2 - 50y + 69 = 0$

7 c. $x^2 + 10x + y^2 - 6y + 18 = 0$

5 d. $-25x^2 + 50x + 9y^2 + 36y - 214 = 0$

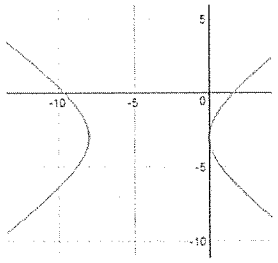
8 e. $x^2 - 8x - y + 20 = 0$

4 f. $49x^2 - 490x + 16y^2 + 64y + 505 = 0$

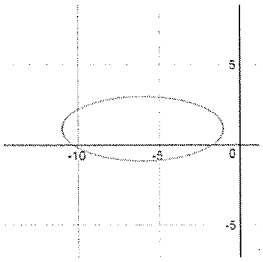
3 g. $x^2 - 8x + y^2 - 12y + 16 = 0$

6 h. $y^2 + 2y - 2x - 11 = 0$

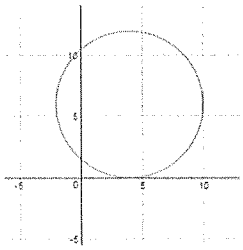
1.



2.



3.



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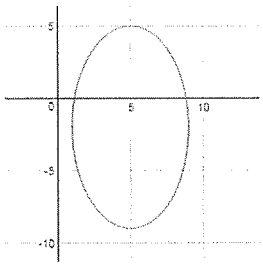

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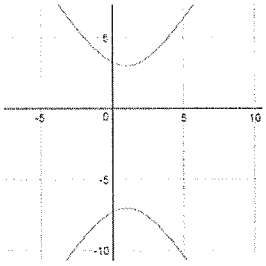

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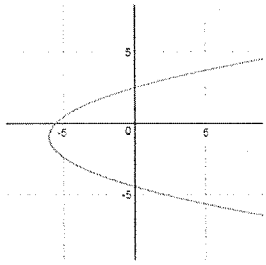

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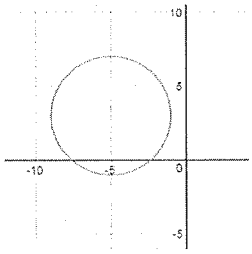

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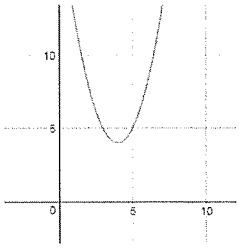
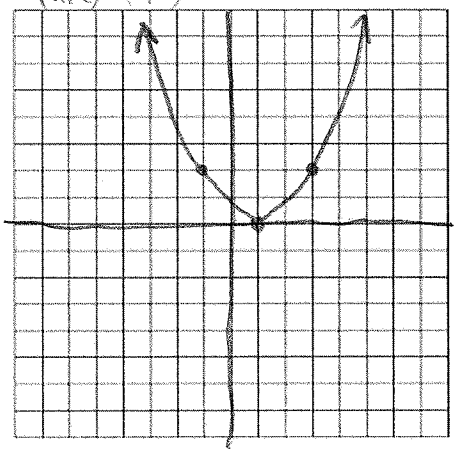


Graph the following:

i. $y = \frac{1}{2}(x-1)^2$

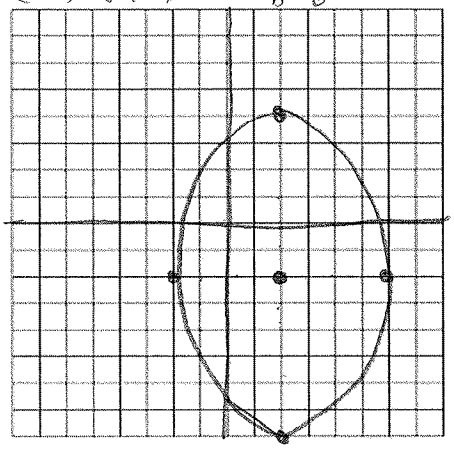
$(h,k) = (1,0)$

x	y
-1	2



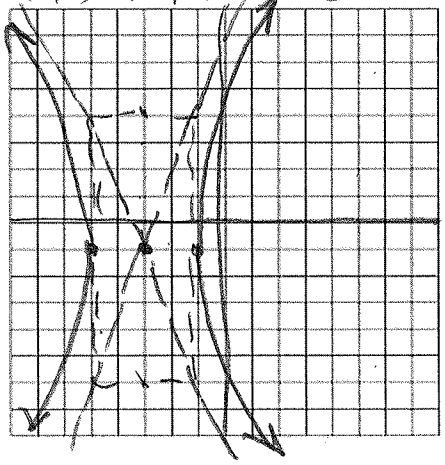
j. $\frac{(x-2)^2}{16} + \frac{(y+2)^2}{36} = 1$

$(h,k) = (2,-2)$ $a = 4$ $b = 6$



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

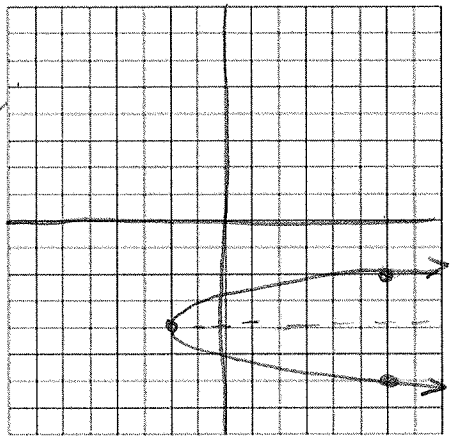
$(h,k) = (-3,-1)$ $a = 2$ $b = 5$



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

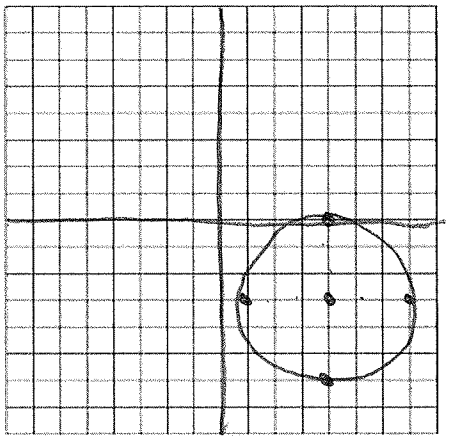
$(h,k) = (-2,-4)$

x	y
6	-2



m. $(x-4)^2 + (y+3)^2 = 9$

$(h,k) = (4,-3)$ $r = 3$



n. $\frac{y^2}{9} - \frac{(x-3)^2}{16} = 1$

$(h,k) = (3,0)$ $a = 3$ $b = 4$