Name _____

Parabolas and Circles Worksheet **Match the equation to the correct information and the correct graph.**

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

2. $\frac{1}{8}(y-10)=(x-7)^2$

3. $(x-1)^2+(y+3)^2=9$

4. $\frac{(x+4)^2}{25}+\frac{(y-4)^2}{25}=1$
(Hint: multiply through by 25)

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

6. $(x-6)^2+(y-6)^2=16$

7. $x^2+y^2=9$

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

9. $y-5=x^2-2x$
(Hint: complete the square)

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

A. center is (0, 0); r = 3

B. center is (-2, 3); r = 2

C. vertex is (-1, -4); opens left; focus is (-1 1/8, -4); directrix is x = -7/8

D. vertex is (-2, -4); opens down; focus is (-2, -4 1/12); directrix y = 3 11/12

E. center is (6, 6); r = 4

16. vertex is (1, 1); opens right; focus is (1 1/8, 1); directrix is x = 7/8

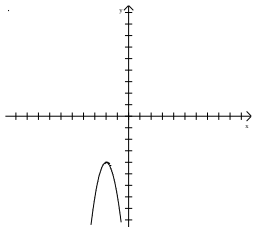
F. center is (-4, 4); r = 5

G. vertex is (7, 10); opens up; focus is (7, 10 1/32); directrix is y = 9 31/32

H. vertex is (1, 4); opens up; focus is (1, 4 1/4); directrix is y = 3 3/4

I. center is (1, -3); r = 3

J.



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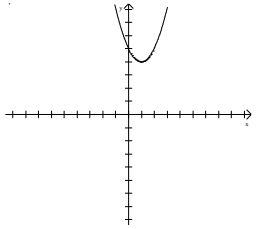

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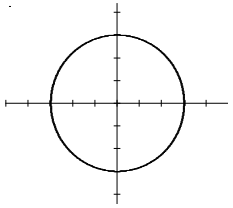

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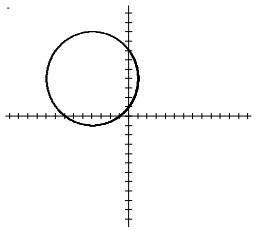

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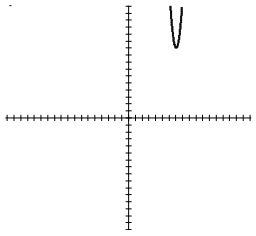

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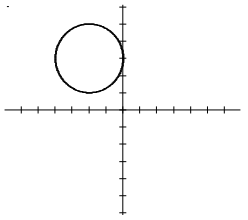

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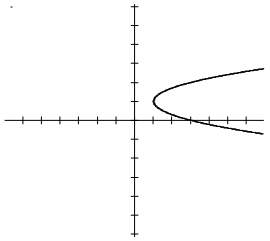

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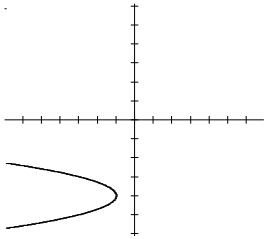

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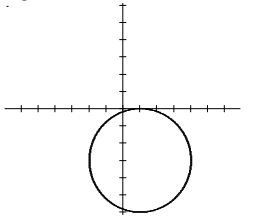

S.