Circle Equations 2

Date_____ Period____

Identify the center and radius of each.

1) $x^2 - 4y = 29 - y^2 + 16x$

2) $337 + 30y + y^2 = -x^2 + 22x$

3) $-8x = -y^2 - 26y - 157 - x^2$

4) $x^2 + y^2 - 26y = -185 - 10x$

5) $-4 + x^2 = 4x - y^2 - 2y$

6) $x^2 + y^2 = -8x - 4y + 16$

7) $x^2 + 10x + y^2 = -190 - 26y$

8) $297 - 30y = -x^2 + 18x - y^2$

9) $x^2 + y^2 - 24x = -353 + 30y$

10) $175 + y^2 + 26x = -x^2 - 12y$

11) $(x-1)^2+(y-10)^2=8$

12) $x^2-6+14x+y^2=-6y$

13) $14y=-y^2-x^2-4x-44$

14) $y^2+152+x^2=16x+22y$

15) $18x+x^2=-114+18y-y^2$

16) $215-10x-28y=-x^2-y^2$

17) $32x + y^2 + x^2 = 14y - 301$

18) $(x + 6)^2 + (y + 5)^2 = 121$

19) $64 + x^2 + 20y = -y^2$

20) $32y + x^2 - 12x = -y^2 - 288$

Geometry Name_____ ID: 1

Circle Equations 2

Date_____ Period____

Identify the center and radius of each.

1) $x^2 - 4y = 29 - y^2 + 16x$

Center: $(8, 2)$
Radius: $\sqrt{97}$

2) $337 + 30y + y^2 = -x^2 + 22x$

Center: $(11, -15)$
Radius: 3

3) $-8x = -y^2 - 26y - 157 - x^2$

Center: $(4, -13)$
Radius: $2\sqrt{7}$

4) $x^2 + y^2 - 26y = -185 - 10x$

Center: $(-5, 13)$
Radius: 3

5) $-4 + x^2 = 4x - y^2 - 2y$

Center: $(2, -1)$
Radius: 3

6) $x^2 + y^2 = -8x - 4y + 16$

Center: $(-4, -2)$
Radius: 6

7) $x^2 + 10x + y^2 = -190 - 26y$

Center: $(-5, -13)$
Radius: 2

8) $297 - 30y = -x^2 + 18x - y^2$

Center: $(9, 15)$
Radius: 3

9) $x^2 + y^2 - 24x = -353 + 30y$

Center: $(12, 15)$
Radius: 4

10) $175 + y^2 + 26x = -x^2 - 12y$

Center: $(-13, -6)$
Radius: $\sqrt{30}$

11) $(x-1)^2+(y-10)^2=8$

Center: $(1, 10)$
Radius: $2\sqrt{2}$

12) $x^2-6+14x+y^2=-6y$

Center: $(-7, -3)$
Radius: 8

13) $14y=-y^2-x^2-4x-44$

Center: $(-2, -7)$
Radius: 3

14) $y^2+152+x^2=16x+22y$

Center: $(8, 11)$
Radius: $\sqrt{33}$

15) $18x+x^2=-114+18y-y^2$

Center: $(-9, 9)$
Radius: $4\sqrt{3}$

16) $215-10x-28y=-x^2-y^2$

Center: $(5, 14)$
Radius: $\sqrt{6}$

17) $32x + y^2 + x^2 = 14y - 301$

Center: $(-16, 7)$
Radius: 2

18) $(x + 6)^2 + (y + 5)^2 = 121$

Center: $(-6, -5)$
Radius: 11

19) $64 + x^2 + 20y = -y^2$

Center: $(0, -10)$
Radius: 6

20) $32y + x^2 - 12x = -y^2 - 288$

Center: $(6, -16)$
Radius: 2