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Day 1 Homework - Equations of Circles
$\qquad$ Block $\qquad$

Graph the following circles. State the center and radius.

3. $4 x^{2}+4 y^{2}=100$
Center:
Radius: $\qquad$
4. $(x+2)^{2}+y^{2}=16$

Center: $\qquad$
Radius: $\qquad$

5. $(x+4)^{2}+(y-6)^{2}=64$

Center:

6. $(x-3)^{2}+(y-5)^{2}=50$

Radius: -


Write the equation of the circle in standard form.
7.

$r=$
8.

$C=$
$r=$

Write the equation of a circle with the given radius and whose center is the origin.
9. $r=13$
10. $\mathrm{r}=\sqrt{8}$
11. $\mathrm{r}=3 \sqrt{5}$

Write the equation of a circle with the given radius and center.
12. $r=6$, Center at $(3,-1)$
13. $r=2 \sqrt{6}$, Center at $(-5,2)$

Write the equation of the circle given a point on the circle and its center.
14. Point $(-2,-2)$, Center $(-5,-8)$
15. Point $(-3,1)$, Center (5, 4)

Write the equation of the circle given the endpoints of a diameter of the circle.
16. $(-3,5)$ and $(5,-1)$
17. $(8,3)$ and $(2,5)$

