1. Find the center and radius of the circle \(9x^2 - 9x + 9y^2 + 162y + 730 = 0\).

2. Solve \(\frac{|3x - 6|}{4} - 8 \geq 12\)

3. \(|-2i^2 - i\sqrt{25}| = \)

4. Find the distance between points \(A(-2, -9)\) and \(B(4, -5)\).

5. Solve \(2|36 - x^2| - 7 = 15\)
6. \[
\frac{7(2x+2h-4)^{-1} - 7(2x-4)^{-1}}{(x+h)-x} = \]

7. Shade the region of the coordinate plane that contains the set of ordered pairs \(\{(x, y) \mid x \geq 4, \ -3 < y \leq 5\}\).

8. Solve for \(R\) in the formula \(V = \frac{\pi h \left(3R^2 + h^2\right)}{6}\)
9. \[ \left( \frac{\frac{1}{3} - 5}{\frac{-8 \times 5}{27 x^{15}}} \right) = \]

10. Solve \[ 8x^3 - 217x^3 + 27 = 0. \]

11. Find the standard equation of the circle whose center is the midpoint of the line segment whose endpoints are \((2,3)\) and \((-4,8)\) and whose diameter is \(\frac{\sqrt{2}}{5}\).

12. Solve by completing the square: \[ 4x^2 - 1 = x \]
13. Solve $\sqrt{x+4} - 6 = \sqrt{x}$

14. \[
\frac{8x^2 - 56x + 80}{4x^2 + 20x - 56}
\]

15. Fully factor $3x^5 + 9x^3 - 3x^2 - 9$.

16. Solve $\frac{x^2 - x + 79}{x + 6} > 9$
17. \((3 + 6i)(4 + 7i) = \)

18. Solve \(-4x^2 + x - 6 = 0\)

19. \(\frac{2}{\sqrt[4]{64(x-1)^2}} = \)

20. What is the domain of \(\sqrt[6]{3x-9}\) ?

21. Rewrite \(|x + 4|\) without using the absolute value symbol.