

Practice 3.2.1**Remember to show your work!**

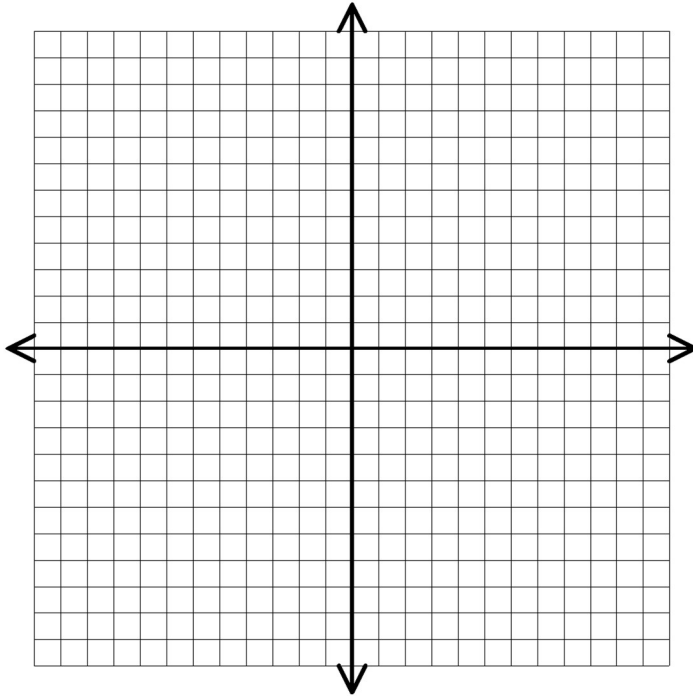
3-80. Rewrite each expression with no parentheses and no negative exponents

a. $(p^{-4}w^{-8})^{-9}$

b. $r^{-7}(r^{-3/2})^8$

c. $6(\sqrt[7]{6})^5$

3-81. Make a complete graph of the four inequalities below on the same set of axes.



i. $2y \geq x - 3$

ii. $x - 2y \geq -7$

iii. $y \leq -2x + 6$

iv. $-9 \leq 2x + y$

a. What type of polygon is formed by the solution of this set of inequalities? Write a convincing argument to justify your answer.

b. What are the vertices of the polygon? If your graph is very accurately drawn, you will be able to determine the points from the graph. If it is not, you will need to solve the systems (pairs) of equations that represent the corners of your graphs.

3-82. Solve the following absolute value inequalities.

a. $|x - 4| < 9$

b. $|\frac{1}{2}x - 45| \geq 80$

c. $|2x - 5| \leq 2$

3-83. Solve the following systems algebraically. What does each solution reveal about the graph of the equations in the system?

a. $x + 2y = 17$
 $x - y = 2$

b. $4x + 5y = 11$
 $2x + 6y = 16$

c. $4x - 3y = -10$
 $x = \frac{1}{4}y - 1$

d. $2x + y = -2x + 5$
 $3x + 2y = 2x + 3y$

3-86. Graph and completely describe the function: $f(x) = 2^{(x-1)} - 4$.

Description:

