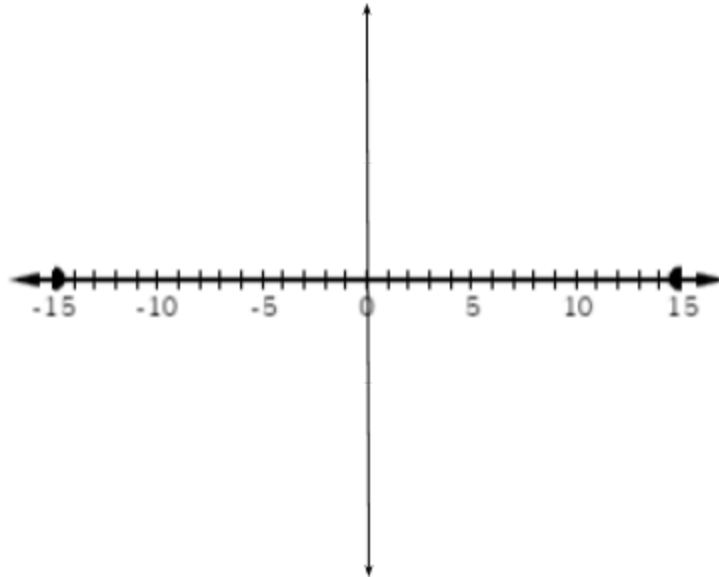


1. A-APR.3 Sketch the graph of the polynomial. $f(x) = -3x^2(x+5)(x-3)^2$

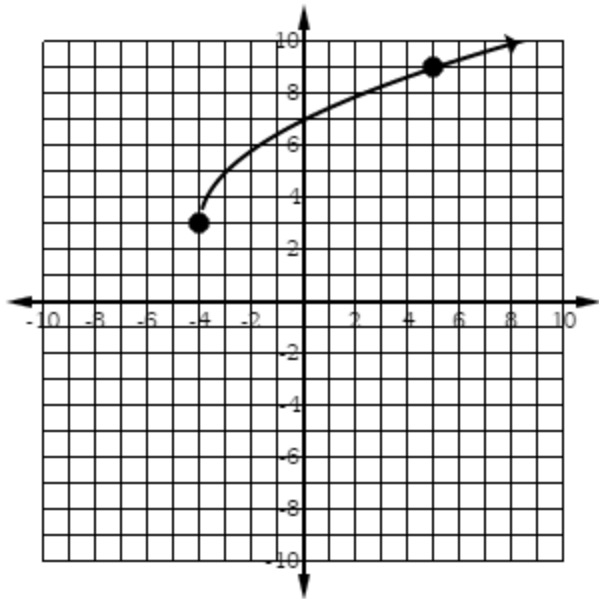


2. A-APR.6. Rewrite $f(x) = -3x^2(x+5)(x-3)^2$ into standard form using multiplication. (You should use the area model to not make mistakes.)

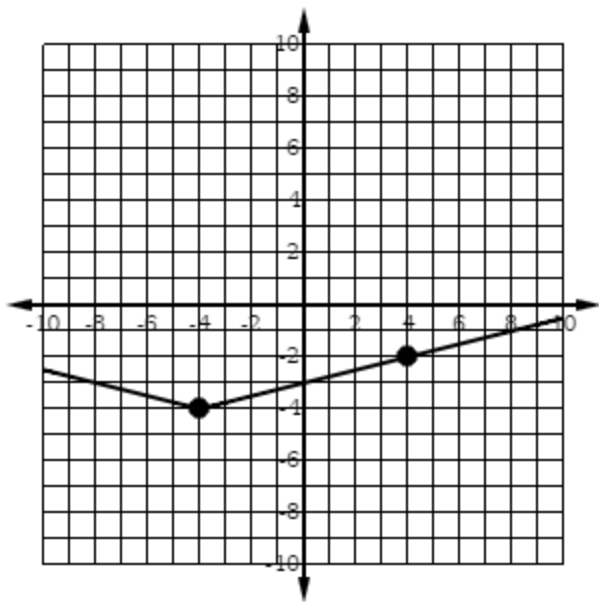
3. F-BF.4a. Find the inverse function. $y = 10^{7x} + 3$. Verify your answer using the value $x = \frac{2}{7}$.

4. F-IF.7b. Write the exact equations of the graphs below. (Solve for a.)

a)



b)



5. F-LE.4. Write the equation of the exponential function in the form $y = ab^x + k$ that passes through the points $(-2, 101)$ and $(1, 5)$ and has a horizontal asymptote at $y = 1$.

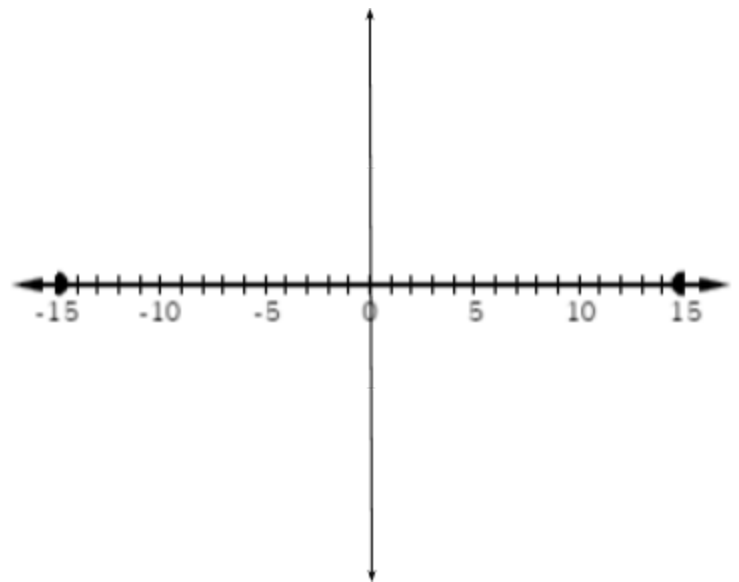
1. A-CED.1. Solve for x . Check for extraneous solutions.

a. $\sqrt{x-5} = x+3$

b. $\log_4(x) - \log_4(x+5) = 3$

2. A-APR.3 Sketch the graph of the polynomial.

$$f(x) = 4(x-1)^3(x+6)$$



3. A-APR.6. Rewrite $f(x) = 4(x-1)^3(x+6)$ into standard form using multiplication. (You should use the area model to not make mistakes.)

4. A-APR.6. Divide.

a.

$$\frac{6x^4 - 5x^3 + 10x^2 - 18x + 5}{3x - 1}$$

b.

$$(x^4 - 6x^3 + 18x - 4) \div (x - 2)$$

c.

$$x - 3 \overline{) x^3 + x^2 - 14x + 3}$$