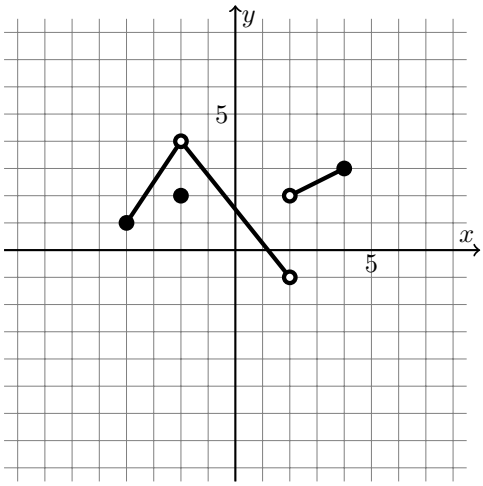
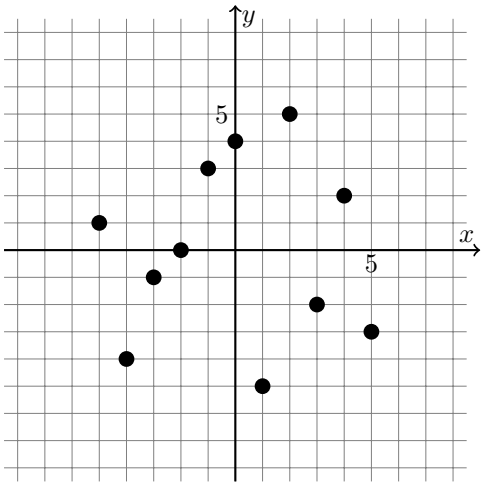
Let

- $f(x) = x^2 + 1$
- $g(x) = \sqrt{x+6}$
- $h(x) = \log_2(x)$
- $j(x) = 3x - 1$



Graph of $y = k(x)$



Graph of $y = p(x)$

Answer the following questions:

1. Simplify $(x+5)^{j(1)}$
2. Simplify $(x + g(3))(x + h(8))$
3. Find $j(j(2))$
4. Find $k(f(0))$
5. Find $(p \circ p)(2) + (p \circ h)(2)$
6. Simplify $(x-10)^{p^{-1}(5)}$
7. Find the domain of $k(x)$
8. Solve the equation $4 - j(5x) = 5 + f(7)$
9. Solve the equation $6 + j(x) = f(x)$