Name: _____

Practice: Linear vs. Nonlinear Equations

For each, say whether the graph will be linear or nonlinear and explain why.

1) $a(x) = 2x - 5$

2) $b(x) = x^3 + 8$

3) $c(x) = -6 + \frac{3}{4}x$

4) $d(x) = \sqrt{4x}$

5) $y = |x - 4|$

6) $5x - 3y = 14$

7) $y = \frac{x}{4} - 1$

8) $y = \frac{2}{x}$

9) $y = -3x + \frac{x}{2} + x^2$

10) $f(x) = \pi x + 3$

11) $g(x) = 5x + \sqrt{16}$

12) $y = x(x - 6)$

13) $h(x) = x^1 + \frac{1}{2}$

14) $j(x) = 10$

15) Create three separate (new) equations that would be linear.

16) Create three separate (new) equations that would be nonlinear.

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