

Advanced Algebra
Graphing Polynomial Functions
January 12-13, 2017

Name: _____ Per: _____

Graph each of the following polynomial functions by hand. Label each x-intercept. Find and label the y-intercept.

(a) (i) $y = (x+5)(x+2)(x-3)$ (ii) $y = (x+5)(x+2)^2(x-3)$ (iii) $y = (x+5)(x+2)^2(x-3)^2$	(b) (i) $y = (x+3)(x-4)$ (ii) $y = (x+3)^2(x-4)$ (iii) $y = (x+3)^2(x-4)^2$	(c) (i) $y = -(x+7)(x+4)(x-2)(x-6)^2$ (ii) $y = -(x+7)(x+4)(x-2)^2(x-6)$ (iii) $y = -(x+7)(x+4)^2(x-2)(x-6)$	(d) Factor first then... (i) $y = x^3 + 3x^2 - 36x - 108$ (ii) $y = x^4 - 29x^2 + 100$ (ec) $y = 3x^5 - 27x^3 - 3x^2 + 27$
---	--	---	---