

**Problem 4.**

	$\alpha$		$\beta$		$\gamma$
aempy	= 1	ptae	= 6	or	= 36 (6 <sup>2</sup> )
ynaoaempy	= 2	tarwmpao	= 12	or	= 216 (6 <sup>3</sup> )
ylla	= 3	ntamnao	= 18	or	= 1296 (6 <sup>4</sup> )
eser	= 4	wramaekr	= 24	$\vdots$	$\vdots$
tamp	= 5	ptae wramaekr	= 30		

•  $\boxed{\alpha \ \beta} = \beta + \alpha$       •  $\alpha_4 \cdot 6^4 + \alpha_3 \cdot 6^3 + \alpha_2 \cdot 6^2 + \beta + \alpha_1 =$

•  $\boxed{\gamma \ \alpha} = \alpha \cdot \gamma \quad (\alpha > 1)$        $\boxed{[\text{ntamnao } \alpha_4] \ [\text{tarwmpao } \alpha_3] \ [\alpha_1] \ [\beta] \ [\text{ptae } \alpha_2]}$

(a) – ynaoaempy ptae  $\implies 2 + 6 = 8$  or  $2 + 36 = 38$  (ptae = 6 or 36)  
 – [tarwmpao ynaoaempy] [ptae ynaoaempy]  $\implies 216 \cdot 2 + 36 \cdot 2 = 504$   
 or [tarwmpao] [ynaoaempy] [ptae ynaoaempy]  $\implies 216 + 2 + 36 \cdot 2 = 290$

(b) (1)  $215 - 22 = 193$       A = 193 = aempy tarwmpao ptae tamp  
 (2)  $111 + 105 = 216$       B = 105 = ylla ptae wramaekr ptae ynaoaempy  
 (3)  $54 \times 28 = 1314 + 198$       C = 198 = ntamnao ptae tamp

(c) tarwmpao ylla ptae  $216 + 3 + 6 = 225$   
 or  $216 + 3 + 36 = 255$   
 or  $216 \cdot 3 + 6 = 654$   
 or  $216 \cdot 3 + 36 = 684$

*The remainder of this page is intentionally left blank.*