

First Challenge: Make Three Orthogonal Latin Squares

dO	sA	yB	pG
p____	y____	s____	d____
y____	p____	d____	s____
s____	d____	p____	y____
d α	s β	y γ	p δ
p____	y____	s____	d____
y____	p____	d____	s____
s____	d____	p____	y____
O α	A β	B γ	G δ

Second Challenge: Make a 4×4 Magic Square

dO	sA	yB	pG
pA	yO	sG	dB
yG	pB	dA	sO
sB	dG	pO	yA

$$\begin{aligned}\{d, s, y, p\} \\ = \{1, 2, 3, 4\}\end{aligned}$$

$$\begin{aligned}\{O, A, B, G\} \\ = \{0, 4, 8, 12\}\end{aligned}$$

What is the sum of each column,
row, and diagonal?

+	+	+	+
+	+	+	+
+	+	+	+
+	+	+	+
