

Transitive Groups of Degree 4

| No. | Group | Order | Dim(CA) | C.A.? | Dim(GA) | Gr.A.? | Cycle_Index |
|-----|----------------|-------|---------|-------|---------|--------|---|
| 1 | $C(4) = 4$ | 4 | 4 | T | 4 | T | $\frac{1}{4}x_1^4 + \frac{1}{4}x_2^2 + \frac{1}{2}x_4$ |
| 2 | $E(4) = 2[x]2$ | 4 | 4 | T | 4 | T | $\frac{1}{4}x_1^4 + \frac{3}{4}x_2^2$ |
| 3 | $D(4)$ | 8 | 3 | T | 6 | F | $\frac{1}{8}x_1^4 + \frac{1}{4}x_1^2x_2 + \frac{3}{8}x_2^2 + \frac{1}{4}x_4$ |
| 4 | A_4 | 12 | 2 | T | 10 | F | $\frac{1}{12}x_1^4 + \frac{2}{3}x_1x_3 + \frac{1}{4}x_2^2$ |
| 5 | S_4 | 24 | 2 | T | 10 | F | $\frac{1}{24}x_1^4 + \frac{1}{4}x_1^2x_2 + \frac{1}{3}x_1x_3 + \frac{1}{8}x_2^2 + \frac{1}{4}x_4$ |