

Answer key - Problem Solving April 26 - 30

Due Tues:

25.2) 125 25.4) $(e_1 + 1)(e_2 + 1)(e_3 + 1) \dots (e_k + 1)$ 25.6) 49

Due Wed:

25.8) 358800 25.10) 5400

Due Thurs:

25.12) 25.14) 5040, 210, 120

Due Fri:

25.16) 8, 4 25.18) 126

Due Mon:

25.20) 330 25.22) $n! / k!(n-k)!$ 25.24) 1

25.26)

$$\begin{aligned} \binom{n}{k} &= \frac{n!}{k!(n-k)!} \\ \binom{n}{n-k} &= \frac{n!}{(n-k)!(n-(n-k))!} = \frac{n!}{(n-k)!k!} \end{aligned}$$

25.28) $n! / k_1! k_2! \dots k_j!$