

```

> read `feb14hw.txt`;
> F:=(n,a,i)->2^(n-i)*binomial(n,i)*binomial(a,2^i)/binomial(2^n,
2^i);

$$F := (n, a, i) \rightarrow \frac{2^{n-i} \text{combinat} \cdot \text{binomial}(n, i) \text{combinat} \cdot \text{binomial}(a, 2^i)}{\text{combinat} \cdot \text{binomial}(2^n, 2^i)}$$
 (1)

> seq(ImplicantAve(3,i,1),i=1..8);
0,  $\frac{3}{7}$ ,  $\frac{9}{7}$ ,  $\frac{18}{7}$ ,  $\frac{30}{7}$ ,  $\frac{45}{7}$ , 9, 12 (2)

> seq(F(3,i,1),i=1..8);
0,  $\frac{3}{7}$ ,  $\frac{9}{7}$ ,  $\frac{18}{7}$ ,  $\frac{30}{7}$ ,  $\frac{45}{7}$ , 9, 12 (3)

> seq(ImplicantAve(4,i,2),i=1..16);
0, 0, 0,  $\frac{6}{455}$ ,  $\frac{6}{91}$ ,  $\frac{18}{91}$ ,  $\frac{6}{13}$ ,  $\frac{12}{13}$ ,  $\frac{108}{65}$ ,  $\frac{36}{13}$ ,  $\frac{396}{91}$ ,  $\frac{594}{91}$ ,  $\frac{66}{7}$ ,  $\frac{66}{5}$ , 18, 24 (4)

> seq(F(4,i,2),i=1..16);
0, 0, 0,  $\frac{6}{455}$ ,  $\frac{6}{91}$ ,  $\frac{18}{91}$ ,  $\frac{6}{13}$ ,  $\frac{12}{13}$ ,  $\frac{108}{65}$ ,  $\frac{36}{13}$ ,  $\frac{396}{91}$ ,  $\frac{594}{91}$ ,  $\frac{66}{7}$ ,  $\frac{66}{5}$ , 18, 24 (5)

> seq(F(4,i,1)-ImplicantAve(4,i,1),i=1..16);
0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0 (6)

> seq(F(4,i,2)-ImplicantAve(4,i,2),i=1..16);
0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0 (7)

```