[I] (8pts) (1) Substitution of \( n = 20 \) in \( n + 5 \) yields

\[ 20 + 5 = 25. \]

(2) Substitution of \( n = 4 \) in \( 1^2 \cdot n(n+1) \) yields

\[ \frac{1}{2} \cdot 4 \cdot 5 = 10. \]

[II] (6pts) (1) Shifting \( n \mapsto n + 1 \) in \( n + 7 \) yields

\[ (n+1) + 7 = n + 8. \]

(2) Shifting \( n \mapsto n + 1 \) in \( \frac{1}{6}n(n+1)(n+2) \) yields

\[ \frac{1}{6}(n+1)(n+2)(n+3). \]

[III] (8pts)

(a) The fourth spot from the left in row 8 in the Pascal is 56.

(b) The sixth spot from the left in row 10 in the Pascal is 252.
(a) The fifth spot from the left in row 16 in the Pascal, in a fraction form, is

\[
\frac{13 \cdot 14 \cdot 15 \cdot 16}{1 \cdot 2 \cdot 3 \cdot 4}.
\]

(b) The tenth spot from the left in row 100 in the Pascal, in a fraction form, is

\[
\frac{92 \cdot 93 \cdot 94 \cdot 95 \cdot 96 \cdot 97 \cdot 98 \cdot 99 \cdot 100}{1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8 \cdot 9}.
\]