Precalculus Practice S.CP.B.9: Combinations 1

NAME:_____

Evaluate:

1. $_7C_3$

[A] 35   [B] 70   [C] 210   [D] 5040

2. $_8C_3$

[A] 112   [B] 336   [C] 40,320   [D] 56

3. Evaluate: $_{11}C_6$

4. Evaluate: $_6C_2$

5. Evaluate: $_9C_8$

6. Use a calculator to evaluate $_7C_4$.

7. Use a graphing calculator to find the ratio of $_{11}P_7$ to $_{11}C_7$.

8. Compare the quantity in Column A with the quantity in Column B.

Column A   Column B

$_{10}C_3$ $_9C_4$

[A] The quantity in Column A is greater.

[B] The quantity in Column B is greater.

[C] The two quantities are equal.

[D] The relationship cannot be determined on the basis of the information supplied.

9. Compare the quantities in Column A and Column B.

Column A   Column B

$_{15}C_8$ $_{15}P_8$

[A] The quantity in Column A is greater.

[B] The quantity in Column B is greater.

[C] The quantities are equal.

[D] The relationship cannot be determined from the information given.

10. Compare the quantities in Column A and Column B.

Column A   Column B

for $r > 1$, $_nC_r$ for $r > 1$, $_nP_r$

[A] The quantity in Column A is greater.

[B] The quantity in Column B is greater.

[C] The quantities are equal.

[D] The relationship cannot be determined from the information given.

[1] A

[2] D

[3] 462

[4] 15

[5] 9

[6] 35

[7] 5040 : 1

[8] B

[9] B

[10] B