

Name: _____

- 1 The value of $5!$ is
080107a (1) $\frac{1}{5}$ (3) 20
(2) 5 (4) 120
- 2 An expression equivalent to $3!$ is
060814a (1) $3 \cdot 3$ (3) $3 \cdot 3 \cdot 3$
(2) $3 \cdot 2 \cdot 1$ (4) -3
- 3 The value of $\frac{7!}{3!}$ is
080503a (1) 840 (3) 7
(2) 24 (4) 4
- 4 What is the value of $\frac{8!}{4!}$?
060605a (1) 1,680 (3) $2!$
(2) 2 (4) $4!$
- 5 Which value is equivalent to ${}_3P_3$?
010713a (1) 1 (3) $3!$
(2) 9 (4) 27
- 6 The bowling team at Lincoln High School must choose a president, vice president, and secretary. If the team has 10 members, which expression could be used to determine the number of ways the officers could be chosen?
060808ia (1) ${}_3P_{10}$ (3) ${}_{10}P_3$
(2) ${}_7P_3$ (4) ${}_{10}P_7$
- 7 How many different 6-letter arrangements can be formed using the letters in the word "ABSENT," if each letter is used only once?
089917a (1) 6 (3) 720
(2) 36 (4) 46,656
- 8 How many different 4-letter arrangements can be formed using the letters of the word "JUMP," if each letter is used only once?
010013a (1) 24 (3) 12
(2) 16 (4) 4
- 9 How many different two-letter arrangements can be formed using the letters in the word "BROWN"?
010925a (1) 10 (3) 20
(2) 12 (4) 25