

PERMUTATIONS

INT. ALG. APPEARANCES: 060808ia, 080816ia multiple choice
060931ia 2-pointer

MATH A APPEARANCES: 080034a 4-pointer
060329a 3-pointer
060023a, 060125a, 010323a, 010435a 2-pointer
089917a, 010013a, 060016a, 010114a, 080107a, 080503a,
060605a, 080616a, 010713a, 060723a, 080727a, 010829a,
060814a, 010925a multiple choice

	REGENTS QUESTIONS	SOLUTIONS
1	080107a The value of $5!$ is (1) $\frac{1}{5}$ (3) 20 (2) 5 (4) 120	(4) $5! = 5 \times 4 \times 3 \times 2 \times 1 = 120$
2	060814a An expression equivalent to $3!$ is (1) $3 \cdot 3$ (3) $3 \cdot 3 \cdot 3$ (2) $3 \cdot 2 \cdot 1$ (4) -3	(2)
3	080503a The value of $\frac{7!}{3!}$ is (1) 840 (3) 7 (2) 24 (4) 4	(1) $\frac{7!}{3!} = \frac{7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1}{3 \times 2 \times 1} = 840$
4	060605a What is the value of $\frac{8!}{4!}$? (1) 1,680 (3) $2!$ (2) 2 (4) $4!$	(1) $\frac{8!}{4!} = \frac{8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1}{4 \times 3 \times 2 \times 1} = 1,680$
5	010713a Which value is equivalent to ${}_3P_3$? (1) 1 (3) $3!$ (2) 9 (4) 27	(3)