

Activity 5

Choices

1. 210
2. 720
3. 9000
4. P_3^8
5. 2520
6. C_7^{12}
7. $C_4^{34} = 46376$
8. $C_6^{45} = 8\ 145\ 060$
9. selecting a committee of 3 people from a group of 20. 1140 ways.
10. 35
11. $2 \times 8 \times 8 \times 8 \times 8 \times 8$
12. $\frac{6!}{3! \times 2!} = 60$
13. Select 4 girls and 2 boys from 7 boys and 9 girls in 1260 ways.
14. 20 tosses, $C_2^n = 190$
 $n = 20, n > 0$
15. 17 players, $C_3^{15} = 455$

Expression	Value
$nCr(10, 4)$	210
$6!$	720
$9 \times 10 \times 10 \times 10$	9000
$8 \times 7 \times 6$	336
$nCr(10, 2) \times nCr(8, 3)$	2520
$nCr(12, 7)$	792
$nCr(34, 4)$	46376
$nCr(45, 6)$	8145060
$nCr(20, 3)$	1140
$\frac{7!}{4!3!}$	35
2×8^5	65536
$6! / (2!3!)$	60
$nCr(7, 4) \times nCr(9, 2)$	1260
$\text{simplify}(nCr(n, 2))$	$\frac{n \cdot (n-1)}{2}$
$\text{solve}(ans=190, n)$	{n=-19, n=20}
$\text{simplify}(nCr(n-2, 3))$	$\frac{(n-2) \cdot (n-3) \cdot (n-4)}{6}$
$\text{solve}(ans=455, n)$	{n=17}