

Name : \_\_\_\_\_

## Evaluating Permutations

L1S1

Evaluate the following.

1)  $P(10, 4)$

2)  $P(30, 2) - P(25, 1)$

3)  $P(7, 6) + 6!$

4)  $\frac{P(27, 23)}{P(26, 22)}$

5)  $2P(20, 1) - 48$

6)  $-\frac{P(13, 5)}{5! \times 9}$

7)  $-440 + P(6, 5)$

8)  $\frac{7}{3P(8, 2)}$

9)  $P(3, 3) + P(11, 4)$

10)  $-\frac{6P(5, 5)}{4! + 3! 2!}$

11)  $P(4, 3) \times P(3, 2)$

12)  $5P(17, 1)$

Name : \_\_\_\_\_

**Answer key**

**Evaluating Permutations**

L1S1

Evaluate the following.

1)  $P(10, 4)$

**5,040**

2)  $P(30, 2) - P(25, 1)$

**845**

3)  $P(7, 6) + 6!$

**5,760**

4)  $\frac{P(27, 23)}{P(26, 22)}$

**27**

5)  $2P(20, 1) - 48$

**-8**

6)  $-\frac{P(13, 5)}{5! \times 9}$

**-143**

7)  $-440 + P(6, 5)$

**280**

8)  $\frac{7}{3P(8, 2)}$

**$\frac{1}{24}$**

9)  $P(3, 3) + P(11, 4)$

**7,926**

10)  $-\frac{6P(5, 5)}{4! + 3! 2!}$

**-20**

11)  $P(4, 3) \times P(3, 2)$

**144**

12)  $5P(17, 1)$

**85**