Factorials Worksheet Answer Key

You'll Need More Than Order of Operations to Solve These!

1. 3!

   $3 \times 2 \times 1 = 6$

2. 2!

   $2 \times 1 = 2$

3. 10!

   $10 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 3628800$

4. 15!

   $15 \times 14 \times 13 \times 12 \times 11 \times 10 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 1.30767 \times 10^{12}$

5. 12!

   $12 \times 11 \times 10 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 479001600$

6. 8!

   $8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 40320$

7. 18!

   $18 \times 17 \times 16 \times 15 \times 14 \times 13 \times 12 \times 11 \times 10 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 6.4023 \times 10^{15}$

8. 2! + 3!

   $2 + 6 = 8$

9. 2! + 9!

   $2 + 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 2 + 362880 = 362882$

10. 5! + 4!

    $5 \times 4 \times 3 \times 2 \times 1 + 4 \times 3 \times 2 \times 1 = 120 + 24 = 144$