Factorials Worksheet Answer Key

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

1. 3!

$$3 \times 2 \times 1 = 6$$

6. 8!

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

2. 2!

$$2 \times 1 = 2$$

7. 18!

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

3. 10!

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

 $8. \ 2! + 3!$

$$2 + 6 = 8$$

4. 15!

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

9. 2! + 9!

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

5. 12!

$$\begin{array}{l} 12\times11\times10\times9\times8\times7\times6\times5\times\\ 4\times3\times2\times1=479001600 \end{array}$$

10. 5! + 4!

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

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