Practice worksheet | Counting and introductory statistics

Factorials

Name: _____ Date: _____

6 questions | 13 marks

1. Evaluate $4!$. [2 marks]

2. Simplify $\frac{8!}{6!}$. [2 marks]

3. Evaluate $\frac{7!}{5!\,2!}$. [2 marks]

4. How many orders can 5 different runners finish in, assuming no ties? [2 marks]

5. Solve $n! = 120$ for a non-negative integer n. [2 marks]

6. Explain why $0!$ is 1 rather than 0 in the expression $\frac{5!}{5!\,0!}$. [3 marks]