

RPN Worksheet 1 - Answer Key

Questions

1. **3**
2. $5 \ 3 \ + \ 4 \ * \ 6 \ -$
3. $(a \ + \ b) \ - \ (c \ * \ d \ / \ e)$
4. **17**
5. $a \ b \ + \ c \ * \ d \ - \ e \ f \ g \ * \ + \ /$
6. $(x \ + \ y \ * \ z) \ / \ (w \ - \ v \ * \ u) \ + \ t$
7. **18**
8. $a \ 2 \ ^ \ b \ 2 \ ^ \ + \ \text{sqrt} \ \text{theta} \ \text{cos} \ *$

Challenges

1. **A:** $5 \ - \ (4 \ - \ (3 \ - \ (2 \ - \ 1)))$ **B:** $5 \ - \ 4 \ + \ 3 \ - \ 2 \ + \ 1$
2. $n - 1$ operators
3. **120** equivalent valid RPN expressions
4. **500**
5. Approximately **0.739085**