Answer keys: MK 2023, Level 6 (Grades 11-12)

- 1. **C** What is the simplified representation ...
- 2. C Julia rolls 5 dice at ...
- 3. E A cylindrical tin is 15 ...
- 4. **D** Let A be a 2023-digit ...
- 5. **D** Emma should colour in the ...
- 6. **B** We call a positive integer ...
- 7. E What is the units digit ...
- 8. **D** What is the value of ...
- 9. **D** 23 animals are sitting in ...
- 10. **B** A square with area 84 ...
- 11. **E** The numbers from 1 to ...
- 12. **D** Two equilateral triangles of different ...
- 13. **B** Consider the five numbers $(a_1, ...$
- 14. C In a three-sided pyramid all ...
- 15. **B** How many pairs of integers ...
- 16. **A** The number (5^{5^6}) is to ...
- 17. **D** Leon has drawn a closed ...
- 18. A For each positive integer n ...
- 19. E The graphs of the functions ...
- 20. C A pentagon is cut into ...
- 21. **B** The diagram shows a spiral ...
- 22. C How many positive integers divide ...
- 23. **B** 13 athletes took part in ...
- 24. E A game marker in the ...
- 25. **D** A part of a polynomial ...
- 26. A The big square shown is ...
- 27. E What is the biggest common ...
- 28. E The numbers from 1 to ...
- 29. A Two identical cylindrical glasses contain ...
- 30. C The product of six consecutive ...

Useful links

- Math Kangaroo resources: https://boo9.com/resources/math-kangaroo
- Practice online (automated grading) @ https://boo9.com/practice
- View these questions online @ click here
- Playlist (all videos this level): <u>click here</u>

