## Answer keys: MK 2023, Level 5 (Grades 9-10)

- 1. A A dark disc with two ...
- 2. **D** On her way to school ...
- 3. **A** The two integers m and ...
- 4. **D** A small square with side ...
- 5. C Today is Thursday. What day ...
- 6. **D** The big rectangle shown is ...
- 7. **D** If one adds the ages ...
- 8. **B** A straight wooden fence is ...
- 9. E How many pairs of positive ...
- 10. **D** After playing 200 games of ...
- 11. E Jennifer wants to save water. ...
- 12. **B** The diagram shows three adjacent ...
- 13. C A rope with length 95 ...
- 14. C The points M and N ...
- 15. **D** The pentagon ABCDE is split ...
- 16. E A tower consists of blocks ...
- 17. **D** A staircase has 2023 steps. ...
- 18. **B** We call a positive integer ...
- 19. **B** A square with side length ...
- 20. **B** The arithmetic mean of five ...
- 21. **E** The numbers from 1 to ...
- 22. E How many different ways are ...
- 23. C Starting with the four numbers ...
- 24. A circle with midpoint (75|30) ...
- 25. **D** When Matilda's smartphone is fully ...
- 26. A Seven pairwise different single-digit numbers ...
- 27. **B** Consider the two touching semicircles ...
- 28. C Leon has drawn a closed ...
- 29. A Several points are marked on ...
- 30. **C** The diagram shows the map ...

## **Useful links**

- 1. Math Kangaroo resources: https://boo9.com/resources/math-kangaroo
- 2. Practice online (automated grading) @ https://boo9.com/practice
- 3. View these questions online @ click here
- 4. Video solution (all problems this set): [coming soon ...]
- 5. Playlist (all videos this level): click here

