

# 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** 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

- 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): [click here](#)

