

Answer keys: MK 2013, Level 6 (Grades 11-12)

1. **C** Which of the following numbers ...
2. **C** The regular eight-sided shape on ...
3. **E** The surface of a prism ...
4. **D** The third root of $\sqrt[3]{3^3}$...
5. **C** The date 2013 is made ...
6. **D** Let f be a linear ...
7. **E** We know that the relationship ...
8. **B** Each of six lone heros ...
9. **E** Inside the cube lattice pictured ...
10. **D** If a certain substance melts ...
11. **C** Ralf has a number of ...
12. **A** How many positive integers n ...
13. **E** A circular carpet is placed ...
14. **D** We are looking at the ...
15. **A** Amongst the graphs shown below ...
16. **D** We are considering rectangles which ...
17. **A** Peter has drawn the graph ...
18. **E** How many pairs of positive ...
19. **C** In a box there are ...
20. **E** In a triangle ABC the ...
21. **A** How many pairs of integers ...
22. **D** The function $f : \mathbb{R} \rightarrow \mathbb{R}$...
23. **A** The cube pictured on the ...
24. **E** How many solutions (x, y) ...
25. **D** Let $f : \mathbb{N} \rightarrow \mathbb{N}$...
26. **C** On the co-ordinate plane a ...
27. **B** If you add the first ...
28. **D** On an island live only ...
29. **E** Julian wrote an algorithm to ...
30. **B** Five cars enter a roundabout ...

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](#)

