

# Answer keys: MK 2014, Level 6 (Grades 11-12)

1. **C** If one removes some 1 ...
2. **C** Today is Carmen, Gerda and ...
3. **B** How big is the value ...
4. **C** In three differently sized baskets ...
5. **E**  $\frac{2^{2014} - 2^{2013}}{2^{2013} - 2^{2012}}$  ...
6. **E** For which of the following ...
7. **E** How many digits has the ...
8. **D** Handsome Fritz has a secret ...
9. **D** The curved surfaces of two ...
10. **C** In the year 2014 all ...
11. **A** A cuboid-shaped box has the ...
12. **B** The winning team of a ...
13. **B** The ratio of the radii ...
14. **C** How many whole number triples ...
15. **D** Six weeks are  $n!$  ( $=$  ...
16. **A** The vertices of a die ...
17. **B** On the packaging of a ...
18. **C** The function  $f(x) = ax$  ...
19. **E** Amongst 10 different positive whole ...
20. **D** PQRS is a rectangle. T ...
21. **D** Let  $a, b, c$  be ...
22. **A** The straight line  $g$  runs ...
23. **E** There are 9 kangaroos that ...
24. **A** In the diagram on the ...
25. **D** Thomas wants to write down ...
26. **A** Two regular polygons with side ...
27. **C** The chain of equations  $k$  ...
28. **B** In the diagram a closed ...
29. **D** The mapping  $f : Z$  ...
30. **D** In the forests of a ...

## 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](#)

