Answer keys: MK 2022, Level 6 (Grades 11-12)

- 1. E [video] Martin's smartphone displays the diagram ...
- 2. **B** [video] How many positive three-digit numbers ...
- 3. **B** [video] Bella is older than Charly ...
- 4. E [video] Which one of the following ...
- 5. A [video] \(5^8\) pencils are distributed evenly ...
- 6. **D** [video] The product of the digits ...
- 7. **D** [video] Four circles with radius 1 ...
- 8. **B** [video] All integers from 2 to ...
- 9. A [video] How many real solutions does ...
- 10. **E** [video] The points A, B, C ...
- 11. **D** [video] Four straight lines that intersect ...
- 12. **E** [video] a, b and c are ...
- 13. **D** [video] We check the water meter ...
- 14. **D** [video] The square pictured, is split ...
- 15. **E** [video] What is the largest common ...
- 16. **B** [video] The diagram shows a map ...
- 17. **E** [video] In a tournament with 8 ...
- 18. C [video] A cuboid with surface area ...
- 19. **B** [video] The arithmetic mean of five ...
- 20. C [video] A circle with midpoint (010) ...
- 21. **B** [video] The vertices of a 20-gon ...
- 22. A [video] Which two building blocks can ...
- 23. **D** [video] A rectangle is split into ...
- 24. **B** [video] Two rectangles are inscribed into ...
- 25. A [video] How many three-digit numbers are ...
- 26. E [video] The numbers 1 to 10 ...
- 27. C [video] A square is placed in ...
- 28. C [video] Let N be a positive ...
- 29. **D** [video] A sequence \(\langle a_n \rangle\) ...
- 30. C [video] Two circles intersect a rectangle ...

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
- Video solution (all problems this set): <u>click here</u>
- Playlist (all videos this level): click here

