

Izzi Math Challenge 2024 - Grade 7

Part 1 - Answers

1. d) 88
2. a) $\frac{1}{10}$
3. d) Cube
4. d) 1.1
5. b) 144
6. e) $a^2 + b^2$
7. b) 12.5cm^2
8. e) 20. (243)
9. a) 22.5
10. c) $y = \frac{1}{2}x^3 - \frac{3}{2}x + 1$

Part 2 - Answers

11. $r = \sqrt{\frac{2S+h^2\pi}{4\pi}} - \frac{h}{2}$

12. Accurate drawing with evidence that the chord was constructed equal to the hypotenuse of a right triangle with sides equal to r and $\frac{r}{2}$ making up the right angle, where r is the radius of the given circle

13. Outputs -4, -5, -5, -1 and 6 in that order. A drawing of a discontinuous curve with no extrema or inflections passing through the points (-2, 6), (-1, -1), (2, -1) and (4, 6).
14. A valid chain of reasoning with the conclusion that there can only be either 4 green, 8 blue and 8 red balls or 5 green, 10 blue and 5 red balls.
- 15.

