

Rochester Math Club Placement Test (Intermediate)

Answers

July 23, 2017

1 Answers

Detailed solutions will be available to you once you become a member of the Rochester Math Club.

1. 8

2. 20%

3. -2

4. $\frac{33\sqrt{3}}{2}$

5. 16

6. 160π

7. 32

8. 4

9. $\frac{1}{6}$

10. 7

11. 345

12. 120

13. 3

14. $\frac{8\sqrt{7}}{7}$

15. 0

16. 11

17. $\frac{2\sqrt{6x-4x^2+4}}{5-4x}$

18. $\frac{693}{14}$

19. 1

20. $15 + 5\sqrt{3}$

21. 3904

22. $70 + \sqrt{1985}$

23. 76

24. $\frac{3}{32}$

25. $\frac{303}{280}$

26. [2]

27. $\frac{2\pi}{3} - \frac{\sqrt{3}}{2}$

28. 80

29. $\sqrt{3}$

30. Yes; $\frac{9\sqrt{21}}{21}$