SAT Math Hard Practice Questions - Set 2

1. Solve for x: 3x^2 + 2x + 6 = 0.

A. -0.3333333333333333

B. (-0.33333333333333326+1.3743685418725535j)

C. (-0.3333333333333334-1.3743685418725535j)

D. None of the above

2. The volume of a sphere is 28716.346666666665 cubic units. What is its radius?

A. 19

B. 21

C. 17

D. None of the above

3. In a bag of 97 marbles, 7 are red. What is the probability of picking a red marble?

A. 0.07216494845360824

B. 0.9278350515463918

C. 0.03608247422680412

D. None of the above

4. The dataset is [5, 75, 88, 21, 56, 82, 51, 93, 66, 48]. What is the mean of the data?

A. 58.5

B. 63.5

C. 54.5

D. None of the above

5. The dataset is [35, 5, 4, 47, 60, 41, 49, 55, 68, 22]. What is the mean of the data?

A. 38.6

B. 43.6

C. 36.6

D. None of the above

6. The volume of a sphere is 20569.093333333334 cubic units. What is its radius?

A. 17

B. 19

C. 15

D. None of the above

7. Solve for x: 4x^2 + 6x + 3 = 0.

A. -0.75

B. (-0.75+0.4330127018922193j)

C. (-0.75-0.4330127018922193j)

D. None of the above

8. The volume of a sphere is 73584.85333333333 cubic units. What is its radius?

A. 26

B. 28

C. 24

D. None of the above

9. The dataset is [47, 66, 87, 72, 24, 58, 54, 95, 68, 98]. What is the mean of the data?

A. 66.9

B. 69.9

C. 61.900000000000006

D. None of the above

10. In a bag of 66 marbles, 15 are red. What is the probability of picking a red marble?

A. 0.22727272727272727

B. 0.7727272727272727

C. 0.11363636363636363

D. None of the above

11. The volume of a sphere is 44579.62666666666 cubic units. What is its radius?

A. 22

B. 24

C. 20

D. None of the above

12. For the function f(x) = 9x + 4, find f(8).

A. 49

B. 31

C. 67

D. None of the above

13. In a bag of 83 marbles, 17 are red. What is the probability of picking a red marble?

A. 0.20481927710843373

B. 0.7951807228915663

C. 0.10240963855421686

D. None of the above

14. The dataset is [46, 85, 59, 60, 45, 73, 93, 72, 93, 59]. What is the mean of the data?

A. 68.5

B. 72.5

C. 66.5

D. None of the above

15. In a bag of 41 marbles, 20 are red. What is the probability of picking a red marble?

A. 0.4878048780487805

B. 0.5121951219512195

C. 0.24390243902439024

D. None of the above

16. In a bag of 81 marbles, 10 are red. What is the probability of picking a red marble?

A. 0.12345679012345678

B. 0.8765432098765432

C. 0.06172839506172839

D. None of the above

17. In a bag of 84 marbles, 18 are red. What is the probability of picking a red marble?

A. 0.21428571428571427

B. 0.7857142857142857

C. 0.10714285714285714

D. None of the above

18. The dataset is [65, 84, 79, 76, 53, 40, 94, 27, 63, 66]. What is the mean of the data?

A. 64.7

B. 67.7

C. 59.7

D. None of the above

19. Solve for x: 7x^2 + 1x + 4 = 0.

A. -0.07142857142857142

B. (-0.0714285714285714+0.7525466966323384j)

C. (-0.0714285714285714-0.7525466966323384j)

D. None of the above

20. Solve for x: 2x^2 + 10x + 1 = 0.

A. -2.5

B. -0.10208423834364044

C. -4.89791576165636

D. None of the above

21. In a bag of 95 marbles, 8 are red. What is the probability of picking a red marble?

A. 0.08421052631578947

B. 0.9157894736842105

C. 0.042105263157894736

D. None of the above

22. Solve for x: 10x^2 + 3x + 5 = 0.

A. -0.15

B. (-0.14999999999999997+0.6910137480542626j)

C. (-0.15000000000000005-0.6910137480542626j)

D. None of the above

23. The volume of a sphere is 17148.586666666666 cubic units. What is its radius?

A. 16

B. 18

C. 14

D. None of the above

24. Solve for x: 8x^2 + 1x + 1 = 0.

A. -0.0625

B. (-0.06249999999999998+0.34798527267687634j)

C. (-0.06250000000000003-0.34798527267687634j)

D. None of the above

25. In a bag of 66 marbles, 6 are red. What is the probability of picking a red marble?

A. 0.09090909090909091

B. 0.9090909090909091

C. 0.045454545454545456

D. None of the above

26. The volume of a sphere is 4186.666666666667 cubic units. What is its radius?

A. 10

B. 12

C. 8

D. None of the above

27. Solve for x: 3x^2 + 2x + 1 = 0.

A. -0.3333333333333333

B. (-0.3333333333333333+0.47140452079103173j)

C. (-0.3333333333333333-0.47140452079103173j)

D. None of the above

28. Solve for x: 2x^2 + 6x + 5 = 0.

A. -1.5

B. (-1.5+0.5j)

C. (-1.5-0.5j)

D. None of the above

29. The volume of a sphere is 14130.0 cubic units. What is its radius?

A. 15

B. 17

C. 13

D. None of the above

30. The volume of a sphere is 73584.85333333333 cubic units. What is its radius?

A. 26

B. 28

C. 24

D. None of the above

31. Solve for x: 8x^2 + 10x + 1 = 0.

A. -0.625

B. -0.10961179679779243

C. -1.1403882032022077

D. None of the above

32. The volume of a sphere is 11488.213333333333 cubic units. What is its radius?

A. 14

B. 16

C. 12

D. None of the above

33. Solve for x: 2x^2 + 6x + 10 = 0.

A. -1.5

B. (-1.5+1.6583123951777j)

C. (-1.5-1.6583123951777j)

D. None of the above

34. Solve for x: 6x^2 + 6x + 8 = 0.

A. -0.5

B. (-0.49999999999999994+1.0408329997330663j)

C. (-0.5000000000000001-1.0408329997330663j)

D. None of the above

35. Solve for x: 6x^2 + 8x + 9 = 0.

A. -0.6666666666666666

B. (-0.6666666666666666+1.0274023338281626j)

C. (-0.6666666666666666-1.0274023338281626j)

D. None of the above

36. The dataset is [95, 6, 34, 97, 52, 80, 91, 20, 61, 29]. What is the mean of the data?

A. 56.5

B. 57.5

C. 53.5

D. None of the above

37. Solve for x: 2x^2 + 8x + 3 = 0.

A. -2.0

B. -0.41886116991581024

C. -3.58113883008419

D. None of the above

38. The dataset is [75, 100, 51, 63, 66, 42, 19, 44, 34, 34]. What is the mean of the data?

A. 52.8

B. 57.8

C. 48.8

D. None of the above

39. Solve for x: 10x^2 + 3x + 1 = 0.

A. -0.15

B. (-0.14999999999999997+0.27838821814150105j)

C. (-0.15000000000000002-0.27838821814150105j)

D. None of the above

40. In a bag of 24 marbles, 5 are red. What is the probability of picking a red marble?

A. 0.20833333333333334

B. 0.7916666666666666

C. 0.10416666666666667

D. None of the above

41. The volume of a sphere is 14130.0 cubic units. What is its radius?

A. 15

B. 17

C. 13

D. None of the above

42. Solve for x: 9x^2 + 4x + 9 = 0.

A. -0.2222222222222222

B. (-0.22222222222222218+0.9749960430435691j)

C. (-0.2222222222222227-0.9749960430435691j)

D. None of the above

43. Solve for x: 5x^2 + 4x + 8 = 0.

A. -0.4

B. (-0.3999999999999999+1.2j)

C. (-0.4000000000000001-1.2j)

D. None of the above

44. Solve for x: 6x^2 + 2x + 10 = 0.

A. -0.16666666666666666

B. (-0.1666666666666666+1.2801909579781012j)

C. (-0.16666666666666674-1.2801909579781012j)

D. None of the above

45. The volume of a sphere is 102108.61333333333 cubic units. What is its radius?

A. 29

B. 31

C. 27

D. None of the above

46. The dataset is [91, 47, 33, 88, 55, 36, 68, 97, 1, 20]. What is the mean of the data?

A. 53.6

B. 54.6

C. 49.6

D. None of the above

47. For the function f(x) = 3x + 2, find f(9).

A. 17

B. 11

C. 23

D. None of the above

48. Solve for x: 5x^2 + 2x + 2 = 0.

A. -0.2

B. (-0.19999999999999996+0.6j)

C. (-0.20000000000000004-0.6j)

D. None of the above

49. Solve for x: 4x^2 + 4x + 2 = 0.

A. -0.5

B. (-0.49999999999999994+0.5j)

C. (-0.5-0.5j)

D. None of the above

50. The volume of a sphere is 4186.666666666667 cubic units. What is its radius?

A. 10

B. 12

C. 8

D. None of the above