# SAT Math Hard Practice Questions - Set 1

1. The volume of a sphere is 91905.70666666667 cubic units. What is its radius?

A. 28

B. 30

C. 26

D. None of the above

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

A. -0.16666666666666666

B. (-0.1666666666666666+1.1426091000668406j)

C. (-0.16666666666666674-1.1426091000668406j)

D. None of the above

3. For the function f(x) = 8x + 7, find f(4).

A. 47

B. 31

C. 63

D. None of the above

4. Solve for x: 9x^2 + 1x + 7 = 0.

A. -0.05555555555555555

B. (-0.0555555555555555+0.8801655287641589j)

C. (-0.05555555555555561-0.8801655287641589j)

D. None of the above

5. For the function f(x) = 10x + 1, find f(8).

A. 51

B. 31

C. 71

D. None of the above

6. In a bag of 49 marbles, 19 are red. What is the probability of picking a red marble?

A. 0.3877551020408163

B. 0.6122448979591837

C. 0.19387755102040816

D. None of the above

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

A. -0.07142857142857142

B. (-0.07142857142857141+0.37115374447904514j)

C. (-0.07142857142857144-0.37115374447904514j)

D. None of the above

8. Solve for x: 10x^2 + 1x + 7 = 0.

A. -0.05

B. (-0.04999999999999995+0.8351646544245034j)

C. (-0.05000000000000006-0.8351646544245034j)

D. None of the above

9. The volume of a sphere is 50939.17333333333 cubic units. What is its radius?

A. 23

B. 25

C. 21

D. None of the above

10. Solve for x: 10x^2 + 4x + 8 = 0.

A. -0.2

B. (-0.19999999999999996+0.8717797887081348j)

C. (-0.20000000000000004-0.8717797887081348j)

D. None of the above

11. For the function f(x) = 9x + 4, find f(6).

A. 49

B. 31

C. 67

D. None of the above

12. 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

13. For the function f(x) = 5x + 1, find f(7).

A. 26

B. 16

C. 36

D. None of the above

14. The dataset is [83, 13, 24, 81, 93, 38, 16, 96, 43, 93]. What is the mean of the data?

A. 58.0

B. 63.0

C. 54.0

D. None of the above

15. The dataset is [86, 25, 39, 37, 76, 64, 65, 51, 76, 5]. What is the mean of the data?

A. 52.4

B. 56.4

C. 50.4

D. None of the above

16. For the function f(x) = 7x + 3, find f(6).

A. 38

B. 24

C. 52

D. None of the above

17. The dataset is [90, 100, 87, 95, 48, 12, 57, 85, 66, 14]. What is the mean of the data?

A. 65.4

B. 67.4

C. 60.400000000000006

D. None of the above

18. For the function f(x) = 6x + 8, find f(1).

A. 38

B. 26

C. 50

D. None of the above

19. For the function f(x) = 1x + 5, find f(10).

A. 10

B. 8

C. 12

D. None of the above

20. The dataset is [75, 51, 83, 22, 22, 65, 30, 2, 99, 26]. What is the mean of the data?

A. 47.5

B. 52.5

C. 42.5

D. None of the above

21. 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

22. The dataset is [45, 74, 46, 59, 35, 85, 71, 78, 94, 1]. What is the mean of the data?

A. 58.8

B. 62.8

C. 53.8

D. None of the above

23. 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

24. The dataset is [27, 55, 8, 62, 47, 73, 71, 26, 65, 53]. What is the mean of the data?

A. 48.7

B. 52.7

C. 45.7

D. None of the above

25. For the function f(x) = 6x + 1, find f(9).

A. 31

B. 19

C. 43

D. None of the above

26. The dataset is [80, 79, 43, 59, 77, 4, 30, 82, 23, 71]. What is the mean of the data?

A. 54.8

B. 59.8

C. 52.8

D. None of the above

27. Solve for x: 10x^2 + 5x + 1 = 0.

A. -0.25

B. (-0.25+0.19364916731037085j)

C. (-0.25-0.19364916731037085j)

D. None of the above

28. Solve for x: 3x^2 + 1x + 8 = 0.

A. -0.16666666666666666

B. (-0.16666666666666657+1.6244657241348273j)

C. (-0.16666666666666677-1.6244657241348273j)

D. None of the above

29. Solve for x: 6x^2 + 4x + 5 = 0.

A. -0.3333333333333333

B. (-0.3333333333333333+0.8498365855987974j)

C. (-0.3333333333333334-0.8498365855987974j)

D. None of the above

30. Solve for x: 4x^2 + 6x + 5 = 0.

A. -0.75

B. (-0.75+0.82915619758885j)

C. (-0.75-0.82915619758885j)

D. None of the above

31. Solve for x: 4x^2 + 3x + 5 = 0.

A. -0.375

B. (-0.37499999999999994+1.0532687216470449j)

C. (-0.37500000000000006-1.0532687216470449j)

D. None of the above

32. The dataset is [22, 85, 35, 83, 92, 38, 59, 90, 42, 64]. What is the mean of the data?

A. 61.0

B. 65.0

C. 60.0

D. None of the above

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

A. -0.5833333333333334

B. (-0.5833333333333333+0.8122328620674136j)

C. (-0.5833333333333334-0.8122328620674136j)

D. None of the above

34. For the function f(x) = 4x + 5, find f(2).

A. 25

B. 17

C. 33

D. None of the above

35. In a bag of 85 marbles, 7 are red. What is the probability of picking a red marble?

A. 0.08235294117647059

B. 0.9176470588235294

C. 0.041176470588235294

D. None of the above

36. The dataset is [56, 3, 29, 3, 51, 19, 5, 93, 21, 58]. What is the mean of the data?

A. 33.8

B. 38.8

C. 29.799999999999997

D. None of the above

37. The dataset is [29, 81, 89, 67, 58, 29, 68, 84, 4, 51]. What is the mean of the data?

A. 56.0

B. 61.0

C. 53.0

D. None of the above

38. For the function f(x) = 1x + 5, find f(3).

A. 10

B. 8

C. 12

D. None of the above

39. The volume of a sphere is 5572.453333333333 cubic units. What is its radius?

A. 11

B. 13

C. 9

D. None of the above

40. In a bag of 29 marbles, 3 are red. What is the probability of picking a red marble?

A. 0.10344827586206896

B. 0.896551724137931

C. 0.05172413793103448

D. None of the above

41. In a bag of 58 marbles, 6 are red. What is the probability of picking a red marble?

A. 0.10344827586206896

B. 0.896551724137931

C. 0.05172413793103448

D. None of the above

42. For the function f(x) = 10x + 5, find f(3).

A. 55

B. 35

C. 75

D. None of the above

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

A. -0.05

B. (-0.04999999999999994+0.9987492177719088j)

C. (-0.05000000000000065-0.9987492177719088j)

D. None of the above

44. The volume of a sphere is 91905.70666666667 cubic units. What is its radius?

A. 28

B. 30

C. 26

D. None of the above

45. For the function f(x) = 3x + 10, find f(9).

A. 25

B. 19

C. 31

D. None of the above

46. Solve for x: 8x^2 + 4x + 6 = 0.

A. -0.25

B. (-0.24999999999999994+0.82915619758885j)

C. (-0.25000000000000006-0.82915619758885j)

D. None of the above

47. Solve for x: 5x^2 + 10x + 7 = 0.

A. -1.0

B. (-1+0.6324555320336759j)

C. (-1-0.6324555320336759j)

D. None of the above

48. The dataset is [25, 64, 14, 86, 50, 38, 65, 64, 3, 42]. What is the mean of the data?

A. 45.1

B. 50.1

C. 41.1

D. None of the above

49. In a bag of 22 marbles, 6 are red. What is the probability of picking a red marble?

A. 0.2727272727272727

B. 0.7272727272727273

C. 0.13636363636363635

D. None of the above

50. The volume of a sphere is 33493.333333333336 cubic units. What is its radius?

A. 20

B. 22

C. 18

D. None of the above