

SAT Math Hard Practice Questions - Set 3

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. The dataset is [17, 48, 78, 61, 81, 75, 9, 78, 2, 61]. What is the mean of the data?
 - A. 51.0
 - B. 54.0
 - C. 46.0
 - D. None of the above

3. 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

4. For the function $f(x) = 9x + 9$, find $f(8)$.
 - A. 54
 - B. 36
 - C. 72
 - D. None of the above

5. For the function $f(x) = 3x + 4$, find $f(3)$.
 - A. 19
 - B. 13

C. 25

D. None of the above

6. The dataset is [50, 95, 2, 86, 100, 9, 21, 98, 76, 6]. What is the mean of the data?

A. 54.3

B. 57.3

C. 53.3

D. None of the above

7. In a bag of 80 marbles, 20 are red. What is the probability of picking a red marble?

A. 0.25

B. 0.75

C. 0.125

D. None of the above

8. For the function $f(x) = 7x + 7$, find $f(10)$.

A. 42

B. 28

C. 56

D. None of the above

9. For the function $f(x) = 3x + 6$, find $f(2)$.

A. 21

B. 15

C. 27

D. None of the above

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

A. -1.0

B. -1.0

C. -1.0

D. None of the above

11. In a bag of 75 marbles, 10 are red. What is the probability of picking a red marble?

A. 0.13333333333333333

B. 0.8666666666666667

C. 0.06666666666666667

D. None of the above

12. For the function $f(x) = 9x + 7$, find $f(10)$.

A. 52

B. 34

C. 70

D. None of the above

13. In a bag of 88 marbles, 19 are red. What is the probability of picking a red marble?

A. 0.2159090909090909

B. 0.7840909090909091

C. 0.10795454545454546

D. None of the above

14. For the function $f(x) = 10x + 4$, find $f(6)$.

A. 54

B. 34

C. 74

D. None of the above

15. Solve for x : $6x^2 + 10x + 3 = 0$.

- A. -0.8333333333333334
- B. -0.3923747814892349
- C. -1.2742918851774319
- D. None of the above

16. In a bag of 89 marbles, 19 are red. What is the probability of picking a red marble?

- A. 0.21348314606741572
- B. 0.7865168539325843
- C. 0.10674157303370786
- D. None of the above

17. The dataset is [14, 92, 84, 28, 82, 74, 35, 37, 16, 9]. What is the mean of the data?

- A. 47.1
- B. 51.1
- C. 43.1
- D. None of the above

18. Solve for x: $7x^2 + 2x + 7 = 0$.

- A. -0.14285714285714285
- B. $(-0.1428571428571428 + 0.989743318610787j)$
- C. $(-0.14285714285714293 - 0.989743318610787j)$
- D. None of the above

19. 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

20. In a bag of 74 marbles, 14 are red. What is the probability of picking a red marble?

A. 0.1891891891891892

B. 0.8108108108108109

C. 0.0945945945945946

D. None of the above

21. Solve for x: $2x^2 + 10x + 10 = 0$.

A. -2.5

B. -1.381966011250105

C. -3.618033988749895

D. None of the above

22. Solve for x: $8x^2 + 10x + 6 = 0$.

A. -0.625

B. $(-0.625 + 0.5994789404140899j)$

C. $(-0.625 - 0.5994789404140899j)$

D. None of the above

23. The dataset is [36, 65, 31, 5, 40, 1, 10, 14, 77, 69]. What is the mean of the data?

A. 34.8

B. 35.8

C. 32.8

D. None of the above

24. For the function $f(x) = 5x + 10$, find $f(5)$.

A. 35

B. 25

C. 45

D. None of the above

25. 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

26. In a bag of 60 marbles, 12 are red. What is the probability of picking a red marble?

- A. 0.2
- B. 0.8
- C. 0.1
- D. None of the above

27. 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

28. For the function $f(x) = 8x + 9$, find $f(7)$.

- A. 49
- B. 33
- C. 65
- D. None of the above

29. The dataset is [88, 72, 14, 80, 65, 35, 56, 82, 93, 92]. What is the mean of the data?

- A. 67.7
- B. 69.7
- C. 64.7
- D. None of the above

30. For the function $f(x) = 5x + 9$, find $f(5)$.

- A. 34
- B. 24
- C. 44
- D. None of the above

31. The dataset is [44, 2, 54, 75, 41, 3, 49, 79, 76, 81]. What is the mean of the data?

- A. 50.4
- B. 52.4
- C. 49.4
- D. None of the above

32. In a bag of 79 marbles, 12 are red. What is the probability of picking a red marble?

- A. 0.1518987341772152
- B. 0.8481012658227848
- C. 0.0759493670886076
- D. None of the above

33. In a bag of 97 marbles, 9 are red. What is the probability of picking a red marble?

- A. 0.09278350515463918
- B. 0.9072164948453608
- C. 0.04639175257731959
- D. None of the above

34. For the function $f(x) = 1x + 10$, find $f(1)$.

- A. 15
- B. 13
- C. 17
- D. None of the above

35. Solve for x: $7x^2 + 5x + 8 = 0$.

- A. -0.35714285714285715
- B. $(-0.3571428571428571 + 1.0076239985475632j)$
- C. $(-0.3571428571428572 - 1.0076239985475632j)$
- D. None of the above

36. In a bag of 95 marbles, 20 are red. What is the probability of picking a red marble?

- A. 0.21052631578947367
- B. 0.7894736842105263
- C. 0.10526315789473684
- D. None of the above

37. In a bag of 42 marbles, 12 are red. What is the probability of picking a red marble?

- A. 0.2857142857142857
- B. 0.7142857142857143
- C. 0.14285714285714285
- D. None of the above

38. 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

39. In a bag of 96 marbles, 9 are red. What is the probability of picking a red marble?

- A. 0.09375
- B. 0.90625
- C. 0.046875
- D. None of the above

40. In a bag of 68 marbles, 4 are red. What is the probability of picking a red marble?

A. 0.058823529411764705

B. 0.9411764705882353

C. 0.029411764705882353

D. None of the above

41. Solve for x: $4x^2 + 5x + 9 = 0$.

A. -0.625

B. (-0.6249999999999999+1.3635890143294642j)

C. (-0.6250000000000001-1.3635890143294642j)

D. None of the above

42. The volume of a sphere is 113040.0 cubic units. What is its radius?

A. 30

B. 32

C. 28

D. None of the above

43. In a bag of 50 marbles, 11 are red. What is the probability of picking a red marble?

A. 0.22

B. 0.78

C. 0.11

D. None of the above

44. 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

45. Solve for x : $3x^2 + 10x + 6 = 0$.

A. -1.6666666666666667

B. -0.7847495629784698

C. -2.5485837703548637

D. None of the above

46. In a bag of 48 marbles, 15 are red. What is the probability of picking a red marble?

A. 0.3125

B. 0.6875

C. 0.15625

D. None of the above

47. The volume of a sphere is 7234.559999999995 cubic units. What is its radius?

A. 12

B. 14

C. 10

D. None of the above

48. In a bag of 47 marbles, 19 are red. What is the probability of picking a red marble?

A. 0.40425531914893614

B. 0.5957446808510638

C. 0.20212765957446807

D. None of the above

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

A. 29

B. 19

C. 39

D. None of the above

50. Solve for x: $10x^2 + 4x + 6 = 0$.

A. -0.2

B. $(-0.19999999999999996 + 0.7483314773547882j)$

C. $(-0.20000000000000004 - 0.7483314773547882j)$

D. None of the above