



SAT Math – Full-Length Practice Test (44 Questions)

1. If $3x - 7 = 20$, what is x ?
2. A line has slope 4 and passes through $(2,3)$. What is its equation?
3. What is the value of $(x^2 - 16) / (x - 4)$, $x \neq 4$?
4. If $f(x)=2x^2-3$, what is $f(5)$?
5. Solve: $|x - 2| = 9$.
6. A quantity increases from 40 to 50. What is the percent increase?
7. What is the solution to $5x + 2 = 3x - 10$?
8. A right triangle has legs 9 and 12. Find the hypotenuse.
9. Convert 4.2×10^3 to standard form.
10. A scatterplot has a positive linear association. Which is true?
11. A system of equations: $x + y = 12$ and $x - y = 4$. What is x ?
12. Simplify: $\sqrt{75}$.
13. A cylinder has radius 3 and height 10. Find its volume.
14. If $(x - 1)(x + 7) = 0$, what are the solutions?
15. Solve: $4^{(x+1)} = 64$.
16. What is the slope of the line through $(5,-1)$ and $(9,7)$?
17. $f(x)=3x-8$. What is $f(-2)$?

18. The mean of five numbers is 18. Four numbers are 10, 20, 19, and 25. Find the fifth.
19. A linear function increases by 3 every step. What is its slope?
20. A circle has diameter 14. What is its area?
21. Solve: $x^2 - 10x + 16 = 0$.
22. If 30% of a number is 45, find the number.
23. A data set has values 3, 7, 9, 15. What is the median?
24. Convert 0.0063 to scientific notation.
25. What is $7/12$ as a decimal?
26. Solve: $2x - 5 \leq 11$.
27. A car travels 180 miles in 3 hours. Find its speed.
28. A sequence has first term 4 and common difference 5. What is term 12?
29. Simplify: $(3x^3)(2x^2)$.
30. A triangle has sides 8,15,17. Is it right?
31. Solve: $(x/3) + 4 = 10$.
32. A rectangle has perimeter 50 and length 12. Find the width.
33. What is the value of $\sqrt{49/9}$?
34. A box holds 10 red, 5 blue, 5 green marbles. Probability of blue?
35. Factor: $x^2 - 9x + 20$.
36. Solve: $2^x = 32$.
37. What is the y-intercept of $y = -3x + 14$?
38. A polygon has interior angle sum 1800° . How many sides?
39. Midpoint between $(-4,10)$ and $(8,2)$?

40. If $\sin\theta = 5/13$, what is $\cos\theta$?

41. A line has slope -2 . A perpendicular line has slope?

42. Solve: $\sqrt{x + 4} = 9$.

43. If $f(x) = x^2 - 6x + 5$, what is $f(7)$?

44. What is the range of $\{2, 7, 4, 9, 15\}$?

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