



ACT Math — Full-Length Practice Test (60 Questions)

Answer Key and Explanations

1. $x = 6$. $3x+7=25 \rightarrow 3x=18 \rightarrow x=6$.
2. Length = 9. Area= $45=5 \times L \rightarrow L=9$.
3. Slope = 3. $(15-3)/(6-2)=12/4=3$.
4. $x+3$. Difference of squares.
5. 11. $f(8)=2(8)-5$.
6. Fifth number = 17. Mean= $12 \rightarrow$ total= 60 .
7. \$0.75 per pen.
8. $x=11$ or $x=-3$.
9. Area = 42. $(1/2) \times 14 \times 6$.
10. 3200.
11. Distance = 5.
12. $g(3)=9-12=-3$.
13. $x>3$.
14. \$68.
15. $5\sqrt{2}$.
16. $x=3$ or $x=-5$.

17. $C=18\pi$.

18. Median = $(9+11)/2 = 10$.

19. $k = 5 \cdot \sqrt{75/3}$.

20. Slope = -2 .

21. Hypotenuse = 17.

22. $x = 32$.

23. $x = 3$.

24. 49 girls.

25. Volume = 120.

26. $6x \blacksquare$.

27. $y = 29$.

28. $1/8$.

29. $(x+3)(x+4)$.

30. $4/5$.

31. $x = 2$.

32. $y = 4x - 3$.

33. -8 .

34. x^2 .

35. $2+19 \cdot 3=59$.

36. $5/10 = 1/2$.

37. Area= $36\pi \rightarrow$ radius=6.

38. $x=4$ or $x=-4$.

39. $x = 26$.

40. 150.

41. $x=10$, $y=6$.

42. x^2+6x+9 .

43. 4.5×10^3 .

44. Yes, $6^2+8^2=10^2$.

45. Side = 12.

46. Range = 17.

47. $x = 2$.

48. $k = 30$.

49. $9/5$.

50. 50 mph.

51. $x = 3$.

52. -12.

53. 9.

54. $n=9$.

55. (1,3).

56. $x=27$.

57. 25%.

58. $x-8$.

59. $r=7$.

60. Linear function.

Prepared by ChatGPT for Math Tutoring AI