



## ACT COMPASS Preparation Worksheet

### Algebra: Linear Equations/ One Variable

1.  $x + 3 = 5$   
 $x = 2$

2.  $x - 6 = 9$   
 $x = 15$

3.  $-32 = x + 3$   
 $x = -35$

4.  $29 - x = 13$   
 $x = 16$

5.  $46 = 47 - x$   
 $x = 1$

6.  $12 = -x + 1$   
 $x = -11$

7.  $4x = 16$   
 $x = 4$

8.  $2x = 10$   
 $x = 5$

9.  $10x = 130$   
 $x = 13$

10.  $14 = -2x$   
 $x = -7$

11.  $-3 + 2x = 11$   
 $x = 7$

12.  $4x + 6 = -10$   
 $x = -4$

13.  $x + 9 = 18 - 2x$   
 $x = 3$

14.  $2x + 6 = 4x - 2$   
 $x = 4$

15.  $-x - 1 = 221 + 2x$   
 $x = -74$

16.  $15 + 5x = 0$   
 $x = -3$

17.  $17x - 12 = 114 + 3x$   
 $x = 9$

18.  $2x - 10 = 10 - 3x$   
 $x = 4$

19.  $12x + 0 = 144$   
 $x = 12$

20.  $-10x - 19 = 19 - 8x$   
 $x = -19$

21.  $6x - 2 + 2x = -2 + 4x + 8$   
 $x = 2$

22.  $-6 + 2x + 3x = 29$   
 $x = 7$

23.  $100x - 89x = 121$   
 $x = 11$

24.  $10x + 5 = -2x - 3x + 80$   
 $x = 5$

25.  $7 + 5x = 2x + 30 + 40$   
 $x = 21$

26.  $-11 + 10x + 11 - 33 = x + 2x + 100$   
 $x = 19$

27.  $10 + 20x - 10 = 15x - 5x + 90$   
 $x = 9$

28.  $5x + 9 + 5x = 30 + 7x + 15 + 15$   
 $x = 17$



29.  $99 + 5x = 2000 - 5x - 911$   
 $x = 99$

30.  $10x + 3x = 100 + 69$   
 $x = 13$

31.  $x + 4 + 5x = 19 + x + 5$   
 $x = 4$

32.  $x + 3 + x + 4 = x + 7 + 2x + 7$   
 $x = -7$

33.  $3 + 4x + 10 = 5x$   
 $x = 13$

34.  $-x - 7 = 5x - 11 - 7x$   
 $x = -4$

35.  $7 + 2x - 7 = 18$   
 $x = 9$

36.  $3x + x = -13 + 3x$   
 $x = -13$

37.  $-6 + 13 - 7 = -2x$   
 $x = 0$

38.  $-2 + 8 = -5x + 7 + 4$   
 $x = 1$

39.  $-7 + x + 4 + 4x = x - 3 + 6 + 3x$   
 $x = 6$

40.  $x + 7x = 56 + 8$   
 $x = 8$

41.  $x^2 + x = 0$   
 $x = -1, 0$

42.  $x^2 - 1 = 0$   
 $x = -1, 1$

43.  $x^2 - 5x + 6 = 0$   
 $x = 2, 3$

44.  $x^2 - 10x + 21 = 0$   
 $x = 3, 7$

45.  $x^2 + 18x + 81 = 0$   
 $x = -9$

46.  $x^2 + 3x - 70 = 0$   
 $x = -10, 7$

47.  $x^2 - 12x + 32 = 0$   
 $x = 4, 8$

48.  $x^2 + 12x + 35 = 0$   
 $x = -7, -5$

49.  $5x^2 - 20 = 0$   
 $x = -2, 2$

50.  $3x^2 - 12x + 63 = 0$   
 $x = -3, 7$