

Name: \_\_\_\_\_

Due Date: \_\_\_\_\_

Teacher: \_\_\_\_\_

Parent Sign: \_\_\_\_\_

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Missing value given the mean (find the missing number  $x$ )

1. Find  $x$ :  $\{3, 7, x, 5\}$  mean = 6
2. Find  $x$ :  $\{10, x, 14\}$  mean = 12
3. Find  $x$ :  $\{2, 4, 6, 8, x\}$  mean = 6
4. Find  $x$ :  $\{x, 15, 18, 12\}$  mean = 15
5. Find  $x$ :  $\{5, 5, 5, 5, x\}$  mean = 6
6. Find  $x$ :  $\{20, 22, x\}$  mean = 21
7. Find  $x$ :  $\{1, 2, 3, x, 4, 5\}$  mean = 3
8. Find  $x$ :  $\{9, 11, 13, x\}$  mean = 11
9. Find  $x$ :  $\{7, x, 9, 7, 8\}$  mean = 8
10. Find  $x$ :  $\{16, 14, 18, x, 12\}$  mean = 15
11. Find  $x$ :  $\{0, x, 4\}$  mean = 2
12. Find  $x$ :  $\{5, 10, x, 15, 20\}$  mean = 12
13. Find  $x$ :  $\{3, 3, 3, x\}$  mean = 3
14. Find  $x$ :  $\{11, x, 13, 15\}$  mean = 13
15. Find  $x$ :  $\{4, 6, 8, 10, x, 12\}$  mean = 8
16. Find  $x$ :  $\{30, x, 35\}$  mean = 32
17. Find  $x$ :  $\{x, 0, 10, 20\}$  mean = 8
18. Find  $x$ :  $\{1, 1, 1, 1, 1, x\}$  mean = 2
19. Find  $x$ :  $\{14, 18, x, 20, 16\}$  mean = 17
20. Find  $x$ :  $\{2, 4, 6, x\}$  mean = 5

Impact on median & mean: removing an outlier (compute original mean & median, then after removing the named outlier)

21.  $\{1, 3, 4, 5, 20\}$  — remove 20
22.  $\{5, 6, 7, 100\}$  — remove 100
23.  $\{8, 9, 10, 11, 1000\}$  — remove 1000
24.  $\{2, 2, 3, 4, 50\}$  — remove 50
25.  $\{15, 16, 15, 14, 100\}$  — remove 100
26.  $\{1, 2, 3, 4, 5, 20\}$  — remove 20
27.  $\{7, 7, 7, 7, 50\}$  — remove 50
28.  $\{4, 5, 6, 7, 100\}$  — remove 100
29.  $\{10, 12, 14, 16, 100\}$  — remove 100



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## Math Worksheet for 6th Grade Mean and median challenge problems

30. {3, 3, 4, 4, 50} — remove 50

31. {20, 20, 21, 22, 100} — remove 100

32. {2, 3, 4, 5, 6, 7, 50} — remove 50

33. {1, 5, 5, 5, 5, 50} — remove 50

34. {9, 10, 11, 12, 13, 100} — remove 100

35. {6, 6, 7, 8, 9, 60} — remove 60

Impact on median & mean: increasing an outlier (compute original mean & median, then after increasing the named value)

36. {1, 2, 3, 4, 5} — change 5 to 50

37. {10, 12, 14, 16, 18} — change 18 to 50

38. {5, 5, 5, 5, 5} — change one 5 to 20

39. {2, 3, 4, 5, 6} — change 6 to 20

40. {1, 100, 2, 3, 4} — change 100 to 200

41. {7, 8, 9, 10} — change 10 to 30

42. {3, 4, 5, 6, 100} — change 100 to 1000

43. {2, 4, 6, 8, 10, 12} — change 12 to 30

44. {1, 2, 3, 4} — change the 1 to 10

45. {5, 6, 7, 8, 9} — change 5 to 50

46. {1, 2, 3, 100} — change 100 to 200

47. {4, 4, 5, 6, 7} — change 7 to 20

48. {2, 3, 3, 4, 5} — change 5 to 15

49. {10, 11, 12, 13, 14} — change 10 to 100

50. {1, 1, 1, 1, 9} — change 9 to 20