

Answers to Even-Numbered Review Exercises from Chapter 2 | Test 1

Chapter 2 Review Exercises (pp. 113 - 115)

6. $S = \emptyset$ (No solution)
12. $S = (-\infty, \infty)$ (All real numbers)
22. $a = 11$
24. Let $n =$ one number $\rightarrow 140$
 $n + 5 =$ second number $\rightarrow 140 + 5 = 145$
 $\Rightarrow n + (n + 5) = 285$
56. Let $x =$ minimum score that Nana must receive $\rightarrow 9.6$
 $\Rightarrow \frac{9.5 + 9.7 + 9.9 + 9.7 + 9.7 + 9.6 + 9.5 + x}{8} \geq 9.65$
 $x \geq 9.6$
60. $S = (-\frac{3}{5}, 0)$
62. $S = (-5, 2]$
68. $x = -9, 0$
70. $x = -\frac{2}{3}, 2$
76. $x = -\frac{8}{5}, 7$
78. $S = (-\infty, -4] \cup [1, \infty)$
84. $S = \emptyset$ (No solution)
92. $S = (-\infty, 4]$
94. $S = [-\frac{4}{3}, \frac{7}{6}]$
96. $S = (5, \infty)$
98. $S = \emptyset$ (No solution)
100. $S = (-\infty, \infty)$ (All real numbers)

Chapter 2 Getting Ready for the Test (pp. 115 - 116)

2. **C** the solution is zero
4. **B** no solution
8. **C** $-4 \leq 5x - 2 \leq 4$
10. **E** $5x - 2 \geq 4$ or $5x - 2 \leq -4$
12. **A** no solution, or \emptyset
14. **B** $(-\infty, \infty)$