

Chapter One Test Review

Date _____ Period _____

Solve each equation.

1) $|a + 10| = 19$

2) $\left|\frac{x}{3}\right| = 1$

3) $\left|\frac{n}{9}\right| = 5$

4) $|n + 2| = 7$

5) $|5 - 5x| = -20$

6) $|7 - 2b| = 15$

7) $|8n - 5| = 43$

8) $|2 - 3n| = 25$

9) $\frac{|7p + 2|}{2} = 5$

10) $1 + |-10x + 4| = 25$

11) $8 + |10x + 3| = 105$

12) $8|4m - 6| = 80$

13) $6 + |7n + 3| = 52$

14) $10|4 + 3r| + 8 = 78$

15) $9|9k - 1| - 3 = 87$

16) $-2 - 8|7 - 6k| = -58$

17) $-8(8x + 6) = 272$

18) $8(4n - 2) = -144$

19) $7(2x + 4) = 140$

20) $144 = -3(8 - 7n)$

21) $72 = 8(6 + x) - 6(2x - 2)$

22) $18 = -6(-3k + 1) + 6(8k + 4)$

23) $14 = -4(4k + 6) - 6(-5k + 3)$

24) $-3(3x + 8) + 8(2x + 8) = 12$

25) $46 = -4\left(4x - \frac{7}{2}\right)$

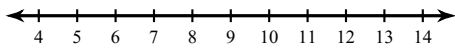
26) $\frac{3}{2}k - 4\left(4k + \frac{1}{2}\right) = \frac{195}{4}$

27) $-\frac{197}{4} = \frac{11}{4}v + 3\left(\frac{11}{4}v + 1\right)$

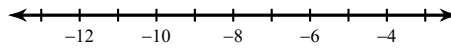
28) $\frac{335}{8} = -\frac{15}{4}\left(\frac{5}{2}v - \frac{11}{3}\right)$

Solve each inequality and graph its solution. Also represent your answer in interval and set-builder notations.

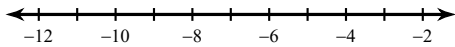
29) $4(6p + 6) < 168$



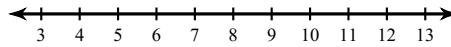
30) $-4(-7 - 5n) - 4 \geq -96$



31) $93 < 3(-4 - 5b)$

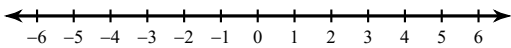


32) $-100 \geq -5a + 5(1 - 2a)$

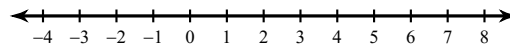


Solve each compound inequality and graph its solution. Write your answer in set-builder and interval notation also.

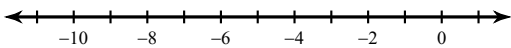
33) $8 > 3 - 5x \geq -2$



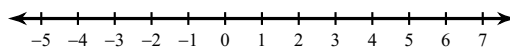
34) $10 + 6n > 28$ or $-8n + 6 > -2$



35) $1 - 2n \leq 17$ and $3n + 9 \leq 6$



36) $-11 < 7 + 9n \leq 25$



Name the set or sets to which each number belongs.

37) -8

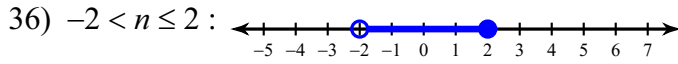
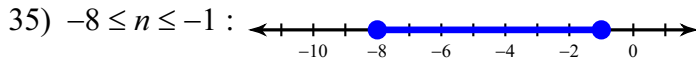
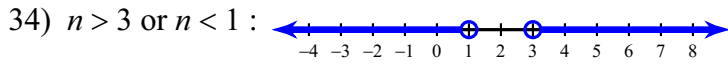
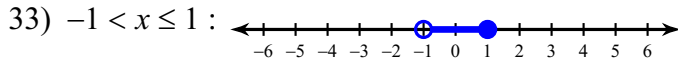
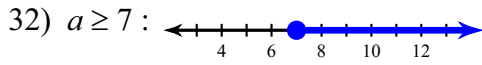
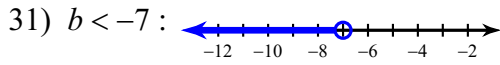
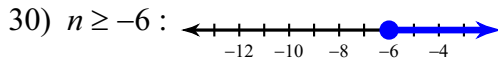
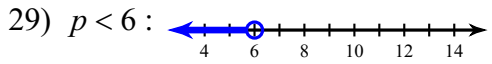
38) $-\frac{17}{7}$

39) $\sqrt{54}$

40) $\frac{8}{13}$

Answers to Chapter One Test Review (ID: 1)

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|--|---------------------------------------|--|--------------------------------------|
| 1) $\{9, -29\}$ | 2) $\{3, -3\}$ | 3) $\{45, -45\}$ | 4) $\{5, -9\}$ |
| 5) No solution. | 6) $\{-4, 11\}$ | 7) $\left\{6, -\frac{19}{4}\right\}$ | 8) $\left\{-\frac{23}{3}, 9\right\}$ |
| 9) $\left\{\frac{8}{7}, -\frac{12}{7}\right\}$ | 10) $\left\{-2, \frac{14}{5}\right\}$ | 11) $\left\{\frac{47}{5}, -10\right\}$ | 12) $\{4, -1\}$ |
| 13) $\left\{\frac{43}{7}, -7\right\}$ | 14) $\left\{1, -\frac{11}{3}\right\}$ | 15) $\left\{\frac{11}{9}, -1\right\}$ | 16) $\left\{0, \frac{7}{3}\right\}$ |
| 17) $\{-5\}$ | 18) $\{-4\}$ | 19) $\{8\}$ | 20) $\{8\}$ |
| 21) $\{-3\}$ | 22) $\{0\}$ | 23) $\{4\}$ | 24) $\{-4\}$ |
| 25) $\{-2\}$ | 26) $\left\{-\frac{7}{2}\right\}$ | 27) $\left\{-\frac{19}{4}\right\}$ | 28) $\{-3\}$ |



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|-------------|----------|----------|----------|
| 37) Z, Q, R | 38) Q, R | 39) I, R | 40) Q, R |
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