

**Lesson 9.1-9.2**  
**Quiz - Form A**

**Unit 9**

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**Tell whether this set is finite or infinite:**

1.  $\{3, 4, 5, 6\}$

**Describe each set by rule (listing the elements). Then graph each set:**

2.  $\{\text{positive integers less than 5}\}$

3.  $\{\text{non-negative whole numbers less than 3}\}$

**Find the solution set of each equation. Then graph the solution set:**

4.  $5x + 17 = 7x + 5$

5.  $7(x - 3) = 3x - 1$

6.  $5(x - 4) - 2(x + 7) = 8(x - 6) - 6$

**Graph the solution set of each sentence:**

7.  $8 \geq x$

8.  $x \geq 0$

9.  $x \neq -2$

10.  $x < 4$

**Lesson 9.1-9.2**  
**Quiz - Form B**

**Unit 9**

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**Tell whether this set is finite or infinite:**

1.  $\{-3, -2, -1, 0, 1, \dots\}$

**Describe each set by rule (listing the elements). Then graph each set:**

2.  $\{\text{integers greater than 0 and less than 3}\}$

3.  $\{\text{non-positive integers greater than -4}\}$

**Find the solution set of each equation. Then graph the solution set:**

4.  $6(y + 3) = 6y - 2$

5.  $6(a + 4) = 4a + 14$

6.  $2(4 - x) + 4 = 5(x + 3) - 2(3x)$

**Graph the solution set of each sentence:**

7.  $w \geq 1$

8.  $-5 < m$

9.  $x < -2$

10.  $5 \neq x$

**Lesson 9.3-9.4**  
**Quiz - Form A**

**Unit 9**

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**Perform the indicated operation on each side and write a true inequality:**

1.  $15 \geq -9$   
Divide by  $-3$
2.  $12 < 15$   
Multiply by  $-2$

**What operation was performed on each side of the first inequality to obtain the second inequality?**

3.  $7 > 5$   
 $3 > 1$
4.  $-33 \leq 24$   
 $11 \geq -8$

**Solve and graph the solution set of each inequality:**

5.  $2c - c > 8 - c$
6.  $2a - 6 \geq 27 - 9a$
7.  $6m - 2 < 6m + 4$

**Lesson 9.3-9.4**  
**Quiz - Form B**

**Unit 9**

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**Perform the indicated operation on each side and write a true inequality:**

1.  $6 \leq 9$   
Multiply by  $-2$
2.  $-4 < 12$   
Divide by  $-4$

**What operation was performed on each side of the first inequality to obtain the second inequality?**

3.  $-7 \leq 2$   
 $-21 \leq 6$
4.  $15 \geq -3$   
 $-5 \leq 1$

**Solve and graph the solution set of each inequality:**

5.  $4d - 6 < -18 - 2d$
6.  $15 - 4b \leq 2b - 3$
7.  $5x + 16 < 5(x + 2)$

**Graph the solution set of the compound inequality:**

1.  $b > -4$  and  $b \geq -9$

**Solve and graph the solution set:**

2.  $x + 6 > 9$  and  $4x + 3 \leq 23$

**Solve each equation if possible:**

3.  $|4m - 6| = 10$

4.  $3|4 - 3t| + 7 = 28$

**Solve each inequality. Graph the solution set:**

5.  $|2a - 4| \geq 8$

6.  $|6 - (4 - t)| \geq 6$

**Lesson 9.5-9.6-9.7**  
**Quiz - Form B**

**Unit 9**

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**Graph the solution set of the compound inequality:**

1.  $k \geq 1$  and  $k < 1$

**Solve and graph the solution set:**

2.  $2x - 5 < 7$  or  $4x > -32$

**Solve each equation if possible:**

3.  $|-2k + 5| = 9$

4.  $3|2x + 1| - 5 = 13$

**Solve each inequality. Graph the solution set:**

5.  $|4b - 2| \geq 10$

6.  $|3d - (d - 6)| < 12$

**Determine whether each set is finite or infinite:**

1.  $\{3, 6, 9, 12\}$
2.  $\{1, 3, 5, \dots\}$

**Find the solution set of each equation. Then graph the solution set:**

3.  $-2(2m - 5) = 4m + (m - 8)$
4.  $3(a + 2) = -a - 1 + 5a$

**Graph the solution set of each sentence:**

5.  $x > 3$
6.  $y \neq \frac{1}{2}$
7.  $-6 \geq b$

**For each inequality, perform the indicated operation on each side and write a true inequality:**

8.  $6 > 3$   
Add  $-4$ .
9.  $-5 \leq 1$   
Multiply by  $-3$ .

**What operation was performed on each side of the first inequality to obtain the second inequality?**

10.  $7 > 5$ ;  $17 > 15$
11.  $16 > -4$ ;  $-4 < 1$

**Solve and graph the solution set of each inequality:**

12.  $3x - 5 > 10$

13.  $4m + 2 < 4m - 2$

14.  $4x - 5 \leq 7x + 13$

15.  $6 - (2a - 4) > -7a + 5$

**Graph the solution set of each compound inequality:**

16.  $y < -4$  or  $x \geq 1$

17.  $7p - 1 < 6$  and  $6p + 2 < 2p + 10$

18.  $-12 < 3t - 3 < 6$

**Solve each equation if possible:**

19.  $|p| = 5$

20.  $|3a + 4| = 8$

21.  $3|y - 3| + 9 = 18$

**Solve each inequality:**

22.  $|y| > 9$

23.  $|3m - 5| \leq 16$

24.  $|5x - (3x - 2)| > 6$

25.  $3|2p - 1| + 4 > 16$

**Determine whether each set is finite or infinite:**

1.  $\{4, 8, 12, \dots\}$
2.  $\{1, 4, 7, 10\}$

**Find the solution set of each equation. Then graph the solution set:**

3.  $5a + 3 - 3a = 7 + 2a - 4$
4.  $6 - 4y = -2y + 5 - 2y$

**Graph the solution set of each sentence:**

5.  $2 > a$
6.  $z \neq \frac{21}{4}$
7.  $\frac{-2}{3} > c$

**For each inequality, perform the indicated operation on each side and write a true inequality:**

8.  $-6 < 2$   
Divide by  $-2$ .
9.  $5 > -3$   
Subtract 3.

**What operation was performed on each side of the first inequality to obtain the second inequality?**

10.  $1 < 8; -6 < 1$
11.  $-5 < 2; 20 > -8$

**Solve and graph the solution set of each inequality:**

12.  $-2x + 7 < 11$

13.  $y + 7 > y - 5$

14.  $5x + 7 \geq -2x + 21$

15.  $\frac{1}{2}x - \frac{5}{6} \geq \frac{1}{3}x$

**Graph the solution set of each compound inequality:**

16.  $x \geq -3$  and  $x < 5$

17.  $2a - 3 < 7$  or  $-3a \leq -9$

18.  $-15 < 4t + 5 < 21$

**Solve each equation if possible:**

19.  $|a| = 4$

20.  $|2b - 5| = 11$

21.  $2|2y - 7| - 16 = 2$

**Solve each inequality:**

22.  $|a| \leq 2$

23.  $|2b - 4| \geq 6$

24.  $|p - (3p + 1)| < 11$

25.  $5|4p + 3| + 6 < 26$