

Algebra 2
Section 1.6 Part 1

Name _____

p45 #1-4, 12-15, 23 - 30

1.	2.
3.	4.
12.	13.
14.	15.

Write a compound inequality in set builder notation and interval notation for each.

#	Set Builder Notation	Interval Notation
23.		
24.		
25.		
26.		
27.		
28.		
29.		
30.		

Key:

1. $\{g \mid -12 < g < -2\}$	2. $\{y \mid 1.5 \leq y \leq 4\}$
3. $\{z \mid z > -3 \text{ or } z < -6\}$	4. $\{m \mid m \geq 4 \text{ or } m \leq -5\}$
12. $\{v \mid 6 < v < 10\}$	13. $\{d \mid -1 \leq d \leq 0.5\}$
14. $\{r \mid r < \frac{-9}{4} \text{ or } r > 3\}$	15. $\{y \mid y < -4 \text{ or } y > 7\}$

#	Set Builder Notation	Interval Notation
23.	$\{x \mid -4 \leq x \leq 6\}$	$[-4, 6]$
24.	$\{x \mid x \leq -4 \text{ or } x \geq 6\}$	$(-\infty, -4] \cup [6, \infty)$
25.	$\{x \mid -12 \leq x \leq -6\}$	$[-12, -6]$
26.	$\{x \mid x < -1 \text{ or } x > 3\}$	$(-\infty, -1) \cup (3, \infty)$
27.	$\{x \mid x \leq 8 \text{ or } x \geq 12\}$	$(-\infty, 8] \cup [12, \infty)$
28.	$\{x \mid -2 < x < 10\}$	$(-2, 10)$
29.	$\{x \mid x \leq -4 \text{ or } x \geq -2\}$	$(-\infty, -4] \cup [-2, \infty)$
30.	$\{x \mid 2 \leq x \leq 8\}$	$[2, 8]$