

## Answers:

1. **C**  $x \leq 7$

2. a) no

c) yes

b) yes

d) yes

3. **A**  $2x - 5 < 7$  – Graph II

**C**  $2(3x - 5) < 32$  – Graph III

**B**  $9x > 3x - 36$  – Graph IV

**D**  $8(-5x - 3) \leq 256$  – Graph VI

4. Graph I :  $\{x|x \leq 6; x \in R\}$  ;  $(-\infty, 6]$

Graph III :  $\{x|x < 7; x \in R\}$  ;  $(-\infty, 7)$

Graph V :  $\{x|x > 6; x \in R\}$  ;  $(6, \infty)$

Graph II :  $\{x|x < 6; x \in R\}$  ;  $(-\infty, 6)$

Graph IV :  $\{x|x > -6; x \in R\}$  ;  $(-6, \infty)$

Graph VI :  $\{x|x \geq -7; x \in R\}$  ;  $[-7, \infty)$

5. a)  $\{x|x \leq 11; x \in R\}$  ;  $(-\infty, 11]$

c)  $\{x|x > -\frac{1}{2}; x \in R\}$  ;  $(-\frac{1}{2}, \infty)$

b)  $\{x|x \geq 12; x \in R\}$  ;  $[12, \infty)$

d)  $\{x|x > -5; x \in R\}$  ;  $(-5, \infty)$

6. a)  $\{x|x \leq -4 \text{ or } x \geq 0; x \in R\}$  ;  $(-\infty, -4] \cup [0, \infty)$

b)  $\{x|-7 \leq x \leq 3; x \in R\}$  ;  $[-7, 3]$

c)  $\{x|x < -\frac{1}{3} \text{ or } x > \frac{5}{2}; x \in R\}$  ;  $(-\infty, -\frac{1}{3}) \cup (\frac{5}{2}, \infty)$

d)  $\{x|-\frac{5}{2} < x < \frac{3}{4}; x \in R\}$  ;  $(-\frac{5}{2}, \frac{3}{4})$

7. a)  $\{x|-5 < x < 2; x \in R\}$  ;  $(-5, 2)$

b)  $\{x|x \leq -5 \text{ or } x \geq 3; x \in R\}$  ;  $(-\infty, -5] \cup [2, \infty)$