

# M-109 QUIZ#1

Name\_\_\_\_\_

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1. Choose the correct answers:

a. The solution of the inequality

$$-11 \leq 3 - 8x \leq -2$$

is

(i)  $\left[ \frac{5}{8}, \frac{7}{4} \right]$       (ii)  $\left[ -\frac{5}{8}, \frac{7}{4} \right]$       (iii)  $\left[ \frac{5}{8}, \frac{7}{4} \right)$       (iv)  $\left( -\frac{5}{8}, -\frac{7}{4} \right)$

b. If  $g(x) = 3, \quad x \leq 0$   
 $-3, \quad x > 0$

then  $R_g$  is

(i)  $(-3, 3)$       (ii)  $R \setminus \{-3, 3\}$       (iii)  $[-3, 3]$       (iv)  $\{-3, 3\}$

c. If a straight line passes through  $(4, 9)$  and  $(18, 2)$  then the  $y$  - intercept is

(i) 9      (ii) 10      (iii) 11      (iv) 12

d. If  $g(x) = \sqrt{2-x}$  and  $f(x) = \sqrt{x+2}$  then  $D_{g+f}$  is  
(i)  $(-\infty, -2]$       (ii)  $[-2, 2]$       (iii)  $(-2, 2]$       (iv)  $[2, \infty)$

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