King Fahd University of Petroleum and Minerals
Prep-Year Math Program
Math (001)-Term (131)
Recitation (1. 8)

Question1: Find the sum of all solutions of the equation $\dfrac{-7+5|3x-4|}{7|3x-4|-2}=-3$

Answer: $\dfrac{8}{3}$

Question 2:

If the interval (m,n) is the solution of the inequality $\left|\dfrac{1}{2}-x\right|-2<0$, then $4m+6n=$

A) 9   B) 1   C) 6   D) 12   E) 4

Question 3: Find the solution set, in interval notation, of

A) $\left|\dfrac{2x+5}{3}\right|-\dfrac{3}{4}<\dfrac{1}{2}$ B) $-3\left|2x-\dfrac{1}{3}\right|>\dfrac{3}{2}$ C) $|3x-1|>0$

Answer:

(A): $SS=\left(-\dfrac{35}{8},-\dfrac{5}{8}\right)$

(B): $SS=\varnothing$

(C): $SS=\left(-\infty,-\dfrac{1}{3}\right)\cup\left(-\dfrac{1}{3},\infty\right)$

Question 4: The solution set of the equation $|5x-1|=|2x+3|$ contains:

(a): only one negative rational number.
(b): one positive and one negative rational number.
(c): only one positive rational number.
(d): two negative rational numbers.
(e): two positive rational numbers.