

KING FAHD UNIVERSITY OF PETROLUUM AND MINERALS

Faculty of Science, Prep-Year Math Program

Math 001 - Term 041

QUIZ #1(P1, P2, and P3) A

Name:

ID#:

Section:

Show all steps

Question1

(12points)

Complete each of the following sentences:

a) The reciprocal of $-2\frac{1}{7}$ is: _____.

b) The property of equality illustrated in the statement:
If $x = 2$ and $y = x + a$, then $y = 2 + a$ is called _____.

c) If $A = \{y \mid y = x - |x|, \text{ where } x \text{ is an integer number with } -2 \leq x < 2\}$, then the list all elements of A is _____.

d) If $x \leq -4$ or $2 < x \leq 5$, then the equivalent interval notation is _____.

e) Writing the expression $\frac{|x+2|}{x+2}, x < -2$ **without the absolute value notation** gives _____.

f) The exact value of $\sqrt{(-3)^2} + \left(-\frac{1}{32}\right)^{-\frac{3}{5}}$ is _____.

Question 2:**(3 points)**

Simplify the expression $-3x^3\sqrt{54x^4} + 2\sqrt[3]{16x^7}$. Write the answer in the simplest form.

Question 3:**(5 points)**

Rationalize the denominator of the expression $\frac{-2}{\sqrt{3} + \sqrt{2} + 1}$. Write the answer in the simplest form.