San José State University
Fall 2015
Math-8: College Algebra
Section 03: MW noon–1:15pm
Section 05: MW 4:30–5:45pm

Quiz #2 (retake)

A1	Commutative Addition
A2	Associative Addition
A3	Additive Identity (0)
A4	Additive Inverse (-a)
M1	Commutative Multiplication
M2	Associative Multiplication
M3	Multiplicative Identity
M4	Multiplicative Inves (1/a)
RD	Right Distributive
LD	Left Distributive
CAN	Cancellation
SUB	Substitution

1. Identify the parts of the term $-\frac{9a^2b^3}{2}$:

Coefficient: _____

Variables: _____

2. Identify the factors in the term $-\frac{x(x+1)^2y^3}{2}$: _____

3. If $ax = 0$ and $a \neq 0$, what do we know about x: _____

4. A careful solution of $2(x-3)=1$ is given below. Give the rationale for each step from the ten real number rules (A1–A4, M1–M4, LD, RD) and two additional rules (SUB, CAN) that we discussed in lecture. Note that some steps have two things to identify.

$2(x-3)=1$	
$2x-6=1$	_____, _____
$(2x-6)+6=1+6$	_____
$(2x-6)+6=7$	_____
$2x+(-6+6)=7$	_____
$2x+0=7$	_____, _____
$2x=7$	_____, _____
$\frac{1}{2}(2x)=\frac{1}{2}(7)$	_____
$\frac{1}{2}(2x)=\frac{7}{2}$	_____
$(\frac{1}{2}2)x=\frac{7}{2}$	_____
$1x=\frac{7}{2}$	_____, _____
$x=\frac{7}{2}$	_____, _____

5. Consider: $\frac{2(x+3)}{x}=-\frac{5}{2}$

a. Solve for x.

b. Evaluate the left-hand side of the equation using your found solution to prove that your solution is correct.