

1. Simplify the following expressions.

a. $-2(-8x)$	b. $3 \cdot k \cdot (-5)$	c. $4(-3x) \cdot 2$
d. $(-8x) + (4x)$	e. $3m(-5) + 2(3m)$	f. $-(-2v)$
g. $2(2x + 7)$	h. $4 - 2(2x + 7)$	i. $3x - 2x + 0.5x$
j. $3(x + 4) - 2(x + 4)$	k. $-2(-8x) + 6(4x)$	l. $-6(2v) + 3a(3)$

2. Where could you put parentheses in $10x + 6 - 8x - 3$ to make a new expression that is still equivalent to the original expression? How do you know that your new expression is equivalent?
3. Where could you put parentheses in $10x + 6 - 8x - 3$ to make a new expression that is not equivalent to the original expression? List as many different answers as you can.

4. Tyler is using the distributive property on the expression $9 - 4(5x - 6)$. Here is his work:

$$9 - 4(5x - 6)$$

$$9 + (-4)(5x + -6)$$

$$9 + -20x + -6$$

$$3 - 20x$$

Mai thinks Tyler's answer is incorrect. She says, "If expressions are equivalent then they are equal for any value of the variable. Why don't you try to substitute the same value for x in all the equations and see where they are not equal?" (from Unit 6, Lesson 21)

- A. Find the step where Tyler made an error.
- B. Explain what he did wrong.
- C. Correct Tyler's work.
5. Write an expression for the new balance using as few terms as possible.
- A checking account has a balance of \$350. A customer makes one withdrawal of x dollars. Then he makes a deposit of \$75.