Name: Answers Date: _____ Period: ____

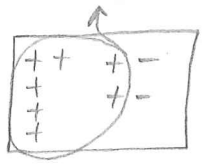
Lesson 3.2.2 Homework Problems 3-46 to 3-50

3-46. Find the value of each expression below. Change any subtraction problem to an equivalent addition problem. Draw a diagram with + and − tiles to justify your answer.

a. $5-7$

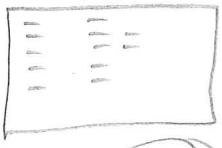
$5+(-7)$

-2



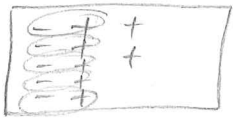
Answer: -2

b. $-5+(-7)$



Answer: -12

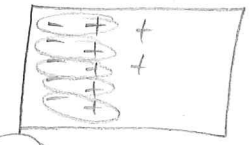
c. $-5+7$



Answer: 2

d. $-5-(-7)$

$-5+7$



Answer: 2

3-47. Rewrite each of the following expressions using only addition. Then simplify the expression.

a. $5(-2)-3$ Addition Problem: $5(-2)+(-3)$, $-10+-3$, -13 Answer: -13

b. $7.69-(-2.5)(-4)$ Addition Problem: $7.69+2.5(-4)$, $7.69+(-10)$, -2.31 Answer: -2.31

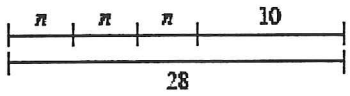
c. $-7+-3-(-5)$ Addition Problem: $-7+(-3)+5$, $-10+5$, -5 Answer: -5

d. $(-4)(-25)-300$ Addition Problem: $(-4)(-25)+(-300)$, $100+(-300)$, -200 Answer: -200

3-48. Each of the diagrams below represents tightrope moves for an acrobat. For each diagram:

- Describe what the diagram shows about the routine and the length of the tightrope.
- Figure out the length of the acrobat's trick.

a.

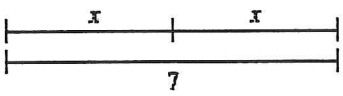


What is going on in the routine? 3n plus a 10 move. It equals 28

n= 6

$3n+10=28$, $-10\ \ -10$, $3n=18$, $3\cdot 6=18$

b.



What is going on in the routine? 2 x equals 7

x= 3.5

$2x=7$, $2(3.5)=7$

3-49. Copy each expression below and simplify it. Be sure to show the steps you use to get the answer.

a. $\frac{11}{12} - \frac{7}{12}$

$\frac{4}{12} = \frac{1}{3}$

b. $\frac{1}{2} + \frac{1}{8} + \frac{3}{4}$

$\frac{4}{8} + \frac{1}{8} + \frac{6}{8} = \frac{11}{8}$

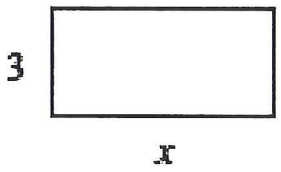
or

$1\frac{3}{8}$

c. $\frac{3}{4} - \frac{1}{6}$

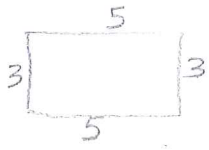
$\frac{9}{12} - \frac{2}{12} = \frac{7}{12}$

3-50. Sketch the rectangle at right on your paper. Calculate the perimeter and area for the given *x*values.



a. $x = 5$

Perimeter = 16 units



Area = bh
= 3·5
Area = 15 units^2

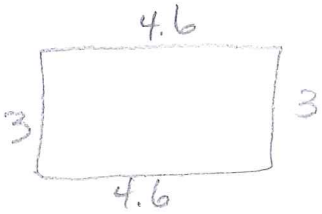
b. $x = 9$

Perimeter = 24 units

A = bh
= 3·9
A = 27 units^2

c. $x = 4.6$

Perimeter = 15,2 units



A = bh
= 3·4.6
= 13.8 units^2