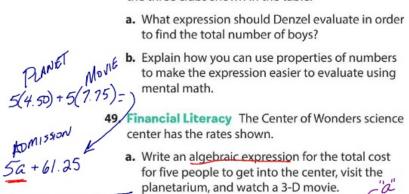
- 48. Denzel wants to know the total number of boys in the three clubs shown in the table.

).	Explain how you can use properties of numbers
	to make the expression easier to evaluate using
`	mental math.
)	



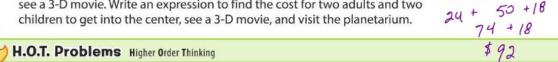
4(7.15) > **b.** If the cost of admission to the center is \$12, how much will it cost for four people to get into the center and watch a 3-D movie?

Cl	Club Membership		
Club	Boys	Girls	
chess	17	19	
drama	28	23	
music	13	21	

Center of V	5/2		
Type of Ticket	Cost (\$)	100	
admission	а	all	1
planetarium	4.50		
3-D movie	7.75		

2(12)+2(9.5)+4(7.75)+4(4.5)

c. Children get a discount of \$2.50 on their tickets to the planetarium if they also 24 + 19 + 31 + 18see a 3-D movie. Write an expression to find the cost for two adults and two children to get into the center, see a 3-D movie, and visit the planetarium.



- 50. (CSS) Identify Structure Write an algebraic expression that can be simplified using at least two different properties. Simplify the expression showing each step and provide a justification for each step.
- 51. Construct an Argument Is the following statement true or false? Explain your reasoning.

$$15 + (4 \cdot 6) = (15 + 4) \cdot 6$$

52. Find the Error Meghan is simplifying the expression 8(3) • 4 • 2(3). Find her mistake and correct it.

$$8(3) \cdot 4 \cdot 2(3) = 24 \cdot 4 \cdot 2$$

$$= 96 \cdot 2$$

$$= 192$$

THE SET OF WHOLE NUMBERS?

- 53. Persevere with Problems If you take any two whole numbers and add them together, the sum is always a whole number. This is the Closure Property for Addition. The set of whole numbers is closed under addition.
 - a. Is the set of whole numbers closed under subtraction? If not, give a counterexample.
 - b. Suppose you had a very small set of numbers that contained only 0 and 1. Would this set be closed under addition? If not, give a counterexample. No
 - c. There is also a Closure Property for Multiplication of Whole Numbers. State this property using the addition property above as a guideline. WHOLE NUMBER & WHOLE NUMBER ALWAY ANOTHER
 - d. Is the set {0, 1} closed under multiplication? Explain.
- 1x1=1 0x0=0 0×1=0 54. Q Building on the Essential Question The number 1 is the identity for multiplication. Do you think that division has an identity? Explain your reasoning.

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WHOLE NUMBER