## Real World Proportions

This lesson is designed to incorporate the use of a Place Mat Activity.
The worksheet below should be passed out to the students or put up on a SMART Board.
The students should be placed into groups of 3 or 4 students.
They should be given one whiteboard per group. After the students respond to the questions individually (in each of the four corners as shown below,) they will compare their answers to those of their group members. As a group they will choose their group response and write it in the center box. Each student should be able to explain the reasoning behind their group's final response.
After the students go through problems, they will be given the opportunity to create their own proportion questions.


Name: $\qquad$
Date: $\qquad$

## PROPOR'TIONAL RELATIONSHIPS



If a woman making $\$ 25$ an hour gets a $10 \%$ raise, she will make an additional $1 / 10$ of her salary an hour.
a. How much will she make in addition to $\$ 25$ an hour?
$\$ 2.50$
b. What is her new salary?
$\$ 27.50$


The bookstore is having a sale. All young adult novels are $15 \%$ off. A student buys 3 books at the same price and saves $\$ 6.75$.
a. How much did the books cost before the sale?
$\$ 6.75 / 15 \%=\$ 45$
b. What was the original price of each book?
$\$ 45 / 3$ books $=\$ 15$


A certain school board wants to purchase new computers for the Middle School computer lab.
They will only invest in new computers if at least $1 / 5$ of the students visit the computer lab every day.

Name: $\qquad$
Date: $\qquad$
a. What percentage of the students must visit the computer lab for the school board to purchase new computers?

20\%
b. If there are 860 students in the school, how many students must visit the computer lab regularly?
$(1 / 5) * 860=172$ students


A local zoo wants to renovate the Koala exhibit so that there is more room for the kaolas to move around. They are asking for donations from local businesses to help them raise the funds they need to improve the exhibit. They need to raise \$65,000. So far, they have raised $25 \%$ of their funds.
a. What fraction of their funds have they raised?

$$
1 / 4
$$

b. How much have they raised so far and how much more do they need to raise?

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65,000 * 25 \%=\$ 16,250
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Now it's your turn!! With your group create your own proportion problem for another group to solve. Remember you need to know the answer, and be creative!

