# Weekkly Math Manio 

Topic: Proportional Relationships (PERCENT APPLICATIONS)

Date Due: Tuesday, November 3 ${ }^{\text {rd }}, 2015$
Standards: CCSS.Math.Content.7.RP.A. 3
Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.

## CCSS.Math.Content.7.EE.B. 3

Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making $\$ 25$ an hour gets a $10 \%$ raise, she will make an additional $1 / 10$ of her salary an hour, or $\$ 2.50$, for a new salary of $\$ 27.50$. If you want to place a towel bar $93 / 4$ inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.

| Family Engagement <br> Solve the percent riddle "How do you make a vegetable necklace?" with a family member! | Words at Work <br> Percent of Change <br> Percent Error <br> Sales Tax <br> Tip/Gratuity <br> Markup <br> Selling Price |
| :---: | :---: |
| Independent Practice <br> Page 147-148 problems 1-13 <br> Page 155-156 problems 1-10 <br> Please tear these pages out and staple it to the packet. | Math in the Real World <br> Complete the Real World Link "Kayaks" on page 151. Complete the table and answer questions 1 and 2. Please do not tear this page out, I have provided a copy of it in this packet. |
| Choose either the online activity Or the textbook activity. |  |
| Online Activity <br> Please do the Textbook Activity this week $\rightarrow$ | Textbook Activity <br> Complete page 143 problems 1-3. Do NOT tear it out, I have provided a copy of it in this packet. |

## Family Engagement

## How Do You Make a Vegetable Necklace?

Use the information given in the chart to fill in the missing values. In the rectangle below, cross out the box containing each correct answer. When you finish, write the letters from the remaining boxes in the spaces at the bottom of the page.

| Article on Sale |  |  | Original Price | Percent Discount | Amoun Disco |  | ale <br> rice |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. calculator |  |  | \$12 | 25\% |  |  |  |
| 2. tent |  |  | \$90 | 25\% |  |  |  |
| 3. sweater |  |  | \$65 | 25\% |  |  |  |
| 4. dress |  |  | \$78.00 | 15\% |  |  |  |
| 5. camera |  |  | \$129.50 | 40\% |  |  |  |
| 6. sports jacket |  |  | \$140 | 35\% |  |  |  |
| 7. tape deck |  |  | \$299.95 | 20\% |  |  |  |
| 8. VCR |  |  | \$575.00 | 10\% |  |  |  |
| 9. racing bike |  |  | \$360 | $33 \frac{1}{3} \%$ |  |  |  |
| $\begin{gathered} \text { DO } \\ \$ 517.50 \end{gathered}$ | $\begin{gathered} \mathrm{Y} \\ \$ 51.80 \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{Fl} \\ \$ 67.50 \end{gathered}$ | $\begin{gathered} \text { ST } \\ \$ 508.50 \end{gathered}$ | $\begin{gathered} \text { OU } \\ \$ 59.99 \end{gathered}$ | $\begin{gathered} \text { OP } \\ \$ 240 \end{gathered}$ | $\begin{gathered} \text { AR } \\ \$ 11.70 \end{gathered}$ | $\begin{gathered} \text { R } \\ \$ 75.20 \end{gathered}$ |
| $\begin{aligned} & \text { ST } \\ & \$ 9 \end{aligned}$ | $\begin{gathered} \mathrm{IN} \\ \$ 43.75 \end{gathered}$ | $\begin{gathered} \text { TO } \\ \$ 120 \end{gathered}$ | $\begin{gathered} \mathrm{BI} \\ \$ 49 \end{gathered}$ | $\begin{gathered} \text { GB } \\ \$ 69.30 \end{gathered}$ | $\begin{aligned} & \text { A } \\ & \$ 3 \end{aligned}$ | $\begin{gathered} \text { OX } \\ \$ 239.96 \end{gathered}$ | $\begin{aligned} & \text { OF } \\ & \$ 16.25 \end{aligned}$ |
| $\begin{gathered} \mathrm{P} \\ \$ 91 \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { EA } \\ \$ 227.86 \end{array}$ | $\begin{gathered} \mathrm{T} \\ \$ 66.30 \end{gathered}$ | RY $\$ 48.75$ | $\begin{gathered} \text { CA } \\ \$ 57.50 \end{gathered}$ | $\begin{gathered} \text { NS } \\ \$ 64.50 \end{gathered}$ | $\begin{gathered} \mathrm{H} \\ \$ 22.50 \end{gathered}$ | $\begin{gathered} \text { UP } \\ \$ 77.70 \end{gathered}$ |
| \$91 |  |  |  |  |  |  |  |


| DEFINITION |  | CHARACTERISTICS |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |


| DEFINITION |  | CHARACTERISTICS |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
| EXAMPLES/MODELS |  |  |
|  |  | NON-EXAMPLES |


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## Math in the Real World

## Real-World Link

Kayaks Alonso plans to buy a new kayak that costs $\$ 2,100$. But when he buys the kayak, it actually costs more because he lives in a county where there is a $7 \%$ sales tax.

You can find the amount of tax on an item by multiplying the price by the tax percentage.

1. Circle the amount below that shows the amount of tax Alonso will pay for the kayak.

$$
\$ 350 \quad \$ 235 \quad \$ 147
$$

2. Use the amount of tax from Exercise 1 to fill in the receipt at the right. Then find the total cost Alonso will pay for the kayak.
3. Multiply 1.07 and $\$ 2,100$. How does the result compare to your answer in Exercise 2?

4. On Alonso's kayaking trip, hiring a guide costs $\$ 50$. Alonso wants to give the guide a 10\% tip. Explain how to find the amount of the tip.

## Online OR Textbook Activity

(First state what you chose. Then, please write out the problem, show all of your work, and box your answer. Please be neat and organized.)

## Real-Wordilink

Speed Racer The Indy 500 is one of the world's great motor races.
The table shows the average speed of the winning race cars for various years.


1. Write the ratio
speed Increase from 1922 to 1955 speed In 1922

Then write the ratio as a percent
Round to the nearest whole percent.

2. Write the ratio
speed Increase from 1955 to 2010 speed In 1955 Then write the ratio as a percent.

Round to the nearest whole percent

3. Why are the amounts of increase the same but the percents different?

