***U5 L5 HW*** Name_____ ID: 1

Extra Practice: Proportions Date_____ Period____

**Solve each proportion.** ***Show all work.***

1) $\frac{4}{8} = \frac{9}{b}$

2) $\frac{4}{n} = \frac{2}{4}$

3) $\frac{6}{3} = \frac{8}{x}$

4) $\frac{x}{6} = \frac{10}{3}$

5) $\frac{9}{2} = \frac{n}{6}$

6) $\frac{2}{8} = \frac{6}{a}$

***Set up a proportion and solve. Show all work and label answer.***
**Answer each question and round your answer to the nearest whole number.**

7) Perry reduced the size of a rectangle to a width of 2 in. What is the new height if it was originally 5 in tall and 10 in wide?

8) Stefan bought one papaya for $3. How many papayas can Huong buy if she has $6?

9) Jack was planning a trip to Argentina. Before going, he did some research and learned that the exchange rate is $1 for 3 Pesos. How many Pesos would he get if he exchanged $3?

10) If you can buy two kiwi fruit for $1, then how many can you buy with $2?

U5 L5 HW Key

Pre-Algebra

Name Key ID: 1

# Extra Practice: Proportions

Date _____ Period ____

**Solve each proportion.**

1) $\frac{4}{8} = \frac{9}{b}$ {18}

$4b = 8 \cdot 9$

$\frac{4b}{4} = \frac{72}{4}$

$b = 18$

2) $\frac{4}{n} = \frac{2}{4}$ {8}

$2n = 4 \cdot 4$

$\frac{2n}{2} = \frac{16}{2}$

$n = 8$

3) $\frac{6}{3} = \frac{8}{x}$ {4}

$6x = 3 \cdot 8$

$\frac{6x}{6} = \frac{24}{6}$

$x = 4$

4) $\frac{x}{6} = \frac{10}{3}$ {20}

$3x = 6 \cdot 10$

$\frac{3x}{3} = \frac{60}{3}$

$x = 20$

5) $\frac{9}{2} = \frac{n}{6}$ {27}

$2n = 9 \cdot 6$

$\frac{2n}{2} = \frac{54}{2}$

$n = 27$

6) $\frac{2}{8} = \frac{6}{a}$ {24}

$2a = 8 \cdot 6$

$\frac{2a}{2} = \frac{48}{2}$

$a = 24$

**Answer each question and round your answer to the nearest whole number.**

7) Perry reduced the size of a rectangle to a width of 2 in. What is the new height if it was originally 5 in tall and 10 in wide?

1 in

$\frac{5}{10} = \frac{x}{2}$

$5 \cdot 2 = 10x$

$\frac{10}{10} = \frac{10x}{10}$

$x = 1$

| | $R_1$ | $R_2$ |
|---|---|---|
| height | 5 in | x |
| width | 10 in | 2 in |

8) Stefan bought one papaya for \$3. How many papayas can Huong buy if she has \$6?

2 papayas

$\frac{3}{1} = \frac{6}{x}$

$\frac{3x}{3} = \frac{6}{3}$

$x = 2$

| \$ | 3 | 6 |
|---|---|---|
| Papayas | 1 | x |

9) Jack was planning a trip to Argentina. Before going, he did some research and learned that the exchange rate is \$1 for 3 Pesos. How many Pesos would he get if he exchanged \$3?

9 Pesos

| \$ | 1 | 3 |
|---|---|---|
| Pesos | 3 | x |

$\frac{1}{3} = \frac{3}{x}$

$1x = 9$

$x = 9$

10) If you can buy two kiwi fruit for \$1, then how many can you buy with \$2?

4 kiwis

| \$ | \$1 | \$2 |
|---|---|---|
| Kiwi | 2 | x |

$\frac{1}{2} = \frac{2}{x}$

$1x = 4$

$x = 4$