

Worksheet 1

Ratios, Rates & Proportions

Name Joe Resende Score _____

Reduce the following ratios and express all three ways. (2 points each answer)

| | To | : | fraction |
|-------------------|----------------|-------------|----------------------------------|
| 1. 8 to 30 | <u>4 to 15</u> | <u>4:15</u> | <u>$\frac{4}{15}$</u> |
| 2. 5 to 15 | <u>1 to 3</u> | <u>1:3</u> | <u>$\frac{1}{3}$</u> |
| 3. 20 to 4 | <u>5 to 1</u> | <u>5:1</u> | <u>$\frac{5}{1}$</u> |
| 4. 6000 to 80,000 | <u>3 to 40</u> | <u>3:40</u> | <u>$\frac{3}{40}$</u> |

Solve the proportions. (4 points each)

5. $\frac{n}{40} = \frac{3}{5}$ $n = 24$ 7. $\frac{45}{60} = \frac{n}{4}$ $n = 3$
6. $\frac{35}{n} = \frac{7}{4}$ $n = 20$ 8. $\frac{2}{5} = \frac{9}{n}$ $n = 22.5$

Use ratio or proportion to complete the following problems. Reduce ratios or proportions to lowest terms. (5 points each)

9. Bob completed 6 homework assignments and Steve completed 10. What is the ratio of completed assignments by Bob to those completed by Steve?

$$\frac{\text{Bob } 6}{\text{Steve } 10} = \frac{3}{5} \quad \underline{3 \text{ to } 5}$$

10. The ratio of homes sold to families to homes sold to single people was 5 to 2. If 26 homes were sold to single people, how many were sold to families?

$$\frac{5}{2} = \frac{f}{26} \quad f = 65 \quad \underline{\hspace{2cm}}$$