Name _____ Date _____

Unit Rates and Ratios - Independent Practice Worksheet

Complete the following problems.

1. Susan tips at the rate of $75 to 5 waiters. How many waiters will she be tipping, if she can afford a $90 tip?

2. The mobile company charges $180 for an hour of service. How many dollars are customers charged every minute?

3. A motor bike gets 60 kilometers per gallon of gasoline. How many gallons of gasoline would the bike need to travel 240 kilometers?

4. A water cooler fills 150 glasses in 30 minutes. How many glasses of water can the cooler fill per minute?

5. A car can travel 120 km in 2 hours. How long will it take the car to travel 300 km?

6. Amilio's designs call for 7 rectangles in every 140 cm. How many rectangles will be present in 220 cm?

7. 2 balls can complete a full rotation in 120 minutes. How many balls can complete a full rotation in 180 min?

8. Jeff's trip will cost $9 if he has 2 attendees at the conference. If there are 36 attendees, how much will the trip cost Jeff?

9. A segment is 10 cm long and is divided into 5 equal parts. If it is divided into 8 equal parts, how many segments long will it be?

10. Maria has 64 flowers. She makes 8 bouquets with the flowers. How many bouquets of flowers will she have if she has 80 flowers?

Name Key Date _____

Unit Rates and Ratios - Independent Practice Worksheet

Complete the following problems.

1. Susan tips at the rate of $75 to 5 waiters. How many waiters will she be tipping, if she can afford a $90 tip? $\frac{\$75}{5w} = \frac{\$90}{x}$ $75x = 90(5)$ $x = \frac{90(5)}{75}$ = 6 waiters OR one waiter = $\frac{75}{5}$ = $15 so, $\frac{\$90}{\text{one waiter}}$: $90 = 15x$ $\frac{90}{15} = x$ $6 = x$

2. The mobile company charges $180 for an hour of service. How many dollars are customers charged every minute? $\frac{\$180}{hr}$ convert $\frac{1\text{ hr}}{60\text{ min}} = 180 \div 60 = \$3/\text{min}$

3. A motor bike gets 60 kilometers per gallon of gasoline. How many gallons of gasoline would the bike need to travel 240 kilometers? $\frac{60\text{ km}}{1\text{ gal.}} = \frac{240\text{ km}}{x\text{ gal}}$ $60x = 240$ $x = 4$ gallons

4. A water cooler fills 150 glasses in 30 minutes. How many glasses of water can the cooler fill per minute? $\frac{150\text{ g}}{30\text{ m}} = \frac{x}{1\text{ m}}$ $150 = 30x$ $5 = x$ $\frac{5\text{ glasses}}{\text{min}}$

5. A car can travel 120 km in 2 hours. How long will it take the car to travel 300 km? $\frac{120\text{ km}}{2\text{ h}} = \frac{300\text{ km}}{x}$ $120x = 600$ $x = 5$ hours

6. Amilio's designs call for 7 rectangles in every 140 cm. How many rectangles will be present in 220 cm? $\frac{7r}{140\text{ cm}} = \frac{x}{220\text{ cm}}$ $7(220) = 140x$ $1540 = 140x$ $11\text{ rec} = x$

7. 2 balls can complete a full rotation in 120 minutes. How many balls can complete a full rotation in 180 min? $\frac{2\text{ b}}{120\text{ min}} = \frac{x}{180\text{ min}}$ $180(2) = 120x$ $360 = 120x$ $3\text{ balls} = x$

8. Jeff's trip will cost $9 if he has 2 attendees at the conference. There are 36 attendees, how much will the trip cost Jeff? $\frac{\$9}{2\text{ a.}} = \frac{x}{36\text{ a}}$ $2x = 324$ $x = 162$

9. A segment is 10 cm long and is divided into 5 equal parts. If it is divided into 8 equal parts, how many segments long will it be? $\frac{10\text{ cm}}{5\text{ parts}} = \frac{x\text{ cm}}{8\text{ parts}}$ $80 = 5x$ $16\text{ cm} = x$

10. Maria has 64 flowers. She makes 8 bouquets with the flowers. How many bouquets of flowers will she have if she has 80 flowers? $\frac{64\text{ fl.}}{8\text{ boug.}} = \frac{80\text{ fl}}{x}$ $64x = 640$ $x = 10$ bouquets