**You must show all work that you typed into your calculator for credit.**

**1.** In a certain area, there are 26 stores to 48 restaurants. Write the ratio of stores to **1. \_\_\_\_\_\_\_\_** restaurants as a fraction in simplest form. Then explain its meaning.

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**2.** On his fruit stand, Mr. Roberts has 12 papayas, 21 star fruits, 27 mangos, and **2. \_\_\_\_\_\_\_\_** 18 strawberries. What is the ratio of the number of papayas to the total number of pieces of fruit? **\_\_\_\_\_\_\_\_**

***Write the ratio in all 3 forms.* \_\_\_\_\_\_\_\_**

**Write two unit ratios for each scenario.**

 **3.** 210 heartbeats in 30 seconds  **3. \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_**

 **4.** 24 puzzles in 4 hours **4. \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_**

 **5.** 84 meters in 7 seconds **5. \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_**

**Use the ratio table given to solve the problem.**

**6.** Ms. Sims traveled to 24 countries in 72 days. At this rate, how many countries would **6. \_\_\_\_\_\_\_\_** she travel to in 60 days?

|  |  |  |  |
| --- | --- | --- | --- |
| **Countries** | 24 |  |  |
| **Days** | 72 |  | 60 |

**7.** Determine if the rates $156 raised for washing 26 cars and $252 raised for washing **7. \_\_\_\_\_\_\_\_\_** 36 cars are equivalent. Explain your reasoning: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**8.** Dylan read 12 pages of a novel in 5 minutes. At the same rate, how many pages **8. \_\_\_\_\_\_\_\_\_** can he read in 7 minutes? **Show your work.**

**9.** Erica can bike 18 miles in 4 hrs. How fast did she bike in miles per hour? **Show your work.** **9. \_\_\_\_\_\_\_\_\_**

**10.** Tina walks at a rate of 150 feet per minute. How many feet per second does Tina walk? **Show your work.** **10.**\_\_\_\_\_\_



**11.** What does the point (1, 25) on the graph represent? (1 pt) **11.** \_\_\_\_\_\_\_\_\_

**12)** The cost of ordering hamburgers is shown in the table below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  **Hamburgers** | 2 | 3 | 4 | 5 |
| **Cost $** | 5 | 10 | 15 | 20 |



**a)** Does the table show a proportional relationship? Explain.

**b)** Graph the data from the table to the right.

**c)** How does the graph support your answer from part a?

Tacos Ordered

|  |  |
| --- | --- |
| **Hours** | **Pages Read** |
| 4 | 100 |
|  |  |
|  |  |

**13)** Complete the ratio table to show a constant rate of change.

**14)** Sally and Maggie work at the hardware store. The wages earned for the weekend are shown in the table and graph below. Who gets paid more per hour? **Show your work** and **explain** how you determined your answer.

**Maggie’s Earnings Work and explanation:**

|  |
| --- |
| **Sally’s Earnings** |
| **Time (h)** | **Earnings($)** |
| 2 | 52 |
| 4 | 104 |
| 6 | 156 |

 

**15)** Determine if the relationship is a proportional relationship. **Write “proportional” or “nonproportional”** and **explain** your reasoning.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Hours** | 5 | 10 | 15 | 20 |
| **Cost $** | 75 | 150 | 210 | 280 |

**15. \_\_\_\_\_\_\_\_\_**

**Bonus)** 65 centimeters per second is equivalent to how many meters per minute? \_\_\_\_\_\_\_\_\_\_\_\_\_