

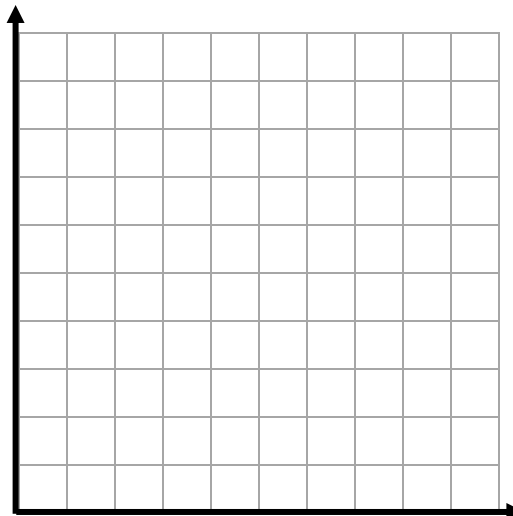
QUIZ 7-3A

1. The table below gives costs and quantities for purchasing tickets for rides at a City Fair.

a. The table below shows the cost for various quantities of pizza, including delivery.

| number of tickets (<i>x</i>) | cost in \$ (<i>y</i>) | <u>cost (\$)</u> ticket |
|--------------------------------------|-------------------------------|----------------------------|
| 5 | 7.50 | |
| 10 | 15 | |
| 15 | 22.50 | |
| 20 | 30 | |
| 25 | 37.50 | |

b. Graph the relationship between number of slices of pizza and cost. Be sure to label and scale axes appropriately.



c. At what ordered pair does the graph crosses the *y*-axis? What does this point represent?

d. Write an equation to represent the cost of different numbers of slices.

e. Does the ticket pricing above represent a proportional relationship? Explain using evidence from the table, the graph and the equation.

QUIZ 7-3A
Continued

2. A sparkling lemonade is made with 2 cups of lemon juice and $5\frac{1}{2}$ cups of sparkling water.
- a. Complete the table below for different size mixtures of this sparkling lemonade that all taste exactly the same.

| | | | | | |
|---|---|----------------|-----------------|---------------|---|
| Cups of lemon juice | 4 | | | $\frac{1}{2}$ | x |
| Cups of sparkling water | | $2\frac{3}{4}$ | | | |
| Total cups of sparkling lemonade | | | $37\frac{1}{2}$ | | |

- b. Name a unit rate in the table above and explain what it represents in the context of the problem.
- c. Najeem wants to bring sparkling lemonade to a class party. If there are 28 students in the class and each student drinks about one cup, about how much lemon juice and how much sparkling water will he need?

3. Find the missing values.

| | |
|---|--|
| <p>a. $\frac{3}{5} = \frac{x}{20}$</p> | <p>b. $\frac{5}{x} = \frac{4}{5}$</p> |
|---|--|

4. Marcus rode his bike at a rate of $2\frac{1}{2}$ miles in $\frac{1}{6}$ of an hour. At this rate, how far would he go in one hour?