## Week 1 Pre-lesson Preview KEY

The purpose of this pre-lesson preview is to get you started to think about the material that you will learn this week. Brightspace will call this a "quiz" but it is not. However, you will need to submit your answers on Brightspace in order for the lessons in the weekly folder to display. For convenience, the questions are shown below.

1-6. Which of the graphs below represent $y$ as a function of $x$ ? Write yes or no for each. (Note that an open circle indicates a point that is not included in the graph; a solid circle indicates a point that is included in the graph.)
1.

2.

3.

4.

5. ${ }^{y} \mathrm{Yes}$
P
6. ${ }^{y} \mathrm{No}$

7. Which of the following would be an example of a measurement of a rate? (Check the ones that describe a rate.)
$\qquad$ miles per hour $\qquad$ number unemployed
$\qquad$ dollars per person
$\qquad$ persons $\qquad$ total people in the labor force $\qquad$ dollars
_ X number unemployed per total people in the labor force
8. The graph shows the revenue $R(q)$ and cost $C(q)$ functions for $q$ units produced and sold.
Use the graph to answer the following.
a. Report the profit generated by producing 500 items. $\qquad$
b. Estimate* how many items the company must produce to break even. around 320

*An estimate is a reasonable guess. You could have many correct answers.
c. If no items are produced, estimate* the production costs. (These are called the fixed costs.) around 900
*An estimate is a reasonable guess. You could have many correct answers.
d. Report the slope of the line $R$.

4
e. Report the slope of the line $C$.

```1.25
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