Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_ Direct Variation Practice

1. An airplane has 5 seats per row. The total number of seats on the airplane can be found using the equation *y* = 5*x* where *y* is the total number of seats and *x* is the number of rows in the plane.

**K= \_\_\_\_\_\_ Independent Variable(words)**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Dependent Variable(words)**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Jose earns $9 for each hour that he works. To determine how much he makes, he uses the equation

*y* = 9*x*, where *y* is Jose’s total earnings, in dollars, and *x* is the number of hours he works.

**K= \_\_\_\_\_\_\_Independent Variable(words)**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Dependent Variable(words)**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. A cat takes 10 breaths every minute while resting. A veterinarian uses the equations *y* = 20*x* to monitor a cat, where *y* is the total number of breaths and *x* is the number of minutes. Use the table below to determine the number of breaths the number of minutes.

|  |  |  |  |
| --- | --- | --- | --- |
| **Minutes** | **Workspace y = 20x** | **Breaths** | **Ordered Pair** |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |

Graph: Label your x and y axis.

4. A used car salesperson earns a commission of $200 for every car sold. Write an equation in the form of *y = kx* that could be used to find the commission earned for selling *x* number of cars.

k= \_\_\_\_\_\_\_\_\_ Equation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Independent Variable**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Dependent Variable**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_