## 2016 Mathematics Standards of Learning

 Algebra Readiness Formative Assessment1A. 8

1. A car can drive $\mathbf{6 0 0}$ miles on $\mathbf{1 8}$ gallons of gasoline. How many miles can a car drive on 15 gallons of gasoline?
2. A point is an element of direct variation at the location $(2,4)$.

|  |  |  |  |  | 61 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 5 |  |  |  |  |  |  |
|  |  |  |  |  | 4 |  |  |  |  |  |  |
|  |  |  |  |  | 3 |  |  |  |  |  |  |
|  |  |  |  |  | 2 |  |  |  |  |  |  |
|  |  |  |  |  | 1 |  |  |  |  |  |  |
| -6 | -5 | -4 | -3 | -2 | -1 | 1 | 2 | 3 | 4 | 5 | 6 |
|  |  |  |  |  | -2 |  |  |  |  |  |  |
|  |  |  |  |  | -3 |  |  |  |  |  |  |
|  |  |  |  |  | -4 |  |  |  |  |  |  |
|  |  |  |  |  | -5 |  |  |  |  |  |  |
|  |  |  |  |  | -6 |  |  |  |  |  |  |

Select all points that are elements of this variation

| $(0,0)$ | $(4,2)$ | $(1,1)$ | $(1,2)$ | $(3,6)$ | $(6,3)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |

3. Which of the following equations represents direct variation?
A. $y=3 x+4$
B. $x y=6$
C. $3 x-6 y=0$
D. $x+y=6$
4. $\$ 1,000$ will be split up equally between workers on a job. If the number of workers on the job increases, the amount each worker is paid decreases. What type of variation exists between the money paid and the number of workers?
A. Direct Variation
B. Inverse Variation
C. Neither
D. Not enough information
