**Virtual Learning Session – Quiz**

**Grade: VIII Subject: MATHEMATICS**

**Unit 1: DIRECT AND INVERSE VARIATION**

**Choose the correct option.**

**1.** If ‘x’ and ‘y’ are in a direct proportion then which of the following is correct?

1. x – y = constant
2. x + y = constant
3. x × y = constant
4. = constant

**2.** If ‘x’ and ‘y’ are in an inverse variation then which of the following is correct?

1. x – y = constant
2. x + y = constant
3. xy = constant
4. = constant

**3.** If ‘A’ can finish a work in ‘n’ days then part of work finished in 1 day is:

1. 1 – n
2. 
3. n – 1
4. none of these

**4.** If amount of work completed by ‘A’ in one day is  then the whole work will be finished by ‘A’ is:

1. n days
2. 1 – n days
3. n – 1 days
4. none of these.

**5.** If an increase in one quantity brings about a corresponding decrease in the other and ice versa, then the two quantities vary:

1. directly
2. inversely
3. sometimes directly and sometimes inversely
4. none of these.

**6.** “If speed is more than time to cover a fixed distance would be less”. This is a ease of:

1. inverse variation
2. direct variation
3. direct variation
4. none of the above.

**8.** Which of the following is not a case of direct variation?

1. Number of sheets of some kind are incresed when their total weight its increased
2. More quentity of petrol is required to travel more distance with a fixed speed
3. More fees would be collected if number of students increased in a class
4. Time taken will be less if number of workers are increased to complete the same work.

**9.** Which of the following is ease of direct variation;

1. If the length of radius is increased the circumference will be increased
2. If number of students is a hostel are increased then the fixed food provision will last for less days
3. For fixed duration, more the periods, lesser will be the duration of one period
4. In case of a cylindrical vessel, lesser the diameter more is the level of water in it.

**10.** If x and y vary inversely. Then using the following table?

|  |  |
| --- | --- |
| x | 5 |
| y | 30 |

The value of x for y = 10 is

1. 10
2. 40
3. 15
4. 20