## Question 1

Car A and Car B are at the opposite ends of a straight road. Car A moves towards Car B for  $\frac{1}{2}$  hours at a speed of 40 miles per hour, and then Car B starts moving towards Car A at a speed of 80 miles per hour. Both the cars keep moving towards each other maintaining their respective speeds till they meet.

| Quantity A                       | Quantity B                       |
|----------------------------------|----------------------------------|
| Total distance traveled by Car A | Total distance traveled by Car B |

| A | Quantity A is greater  |
|---|--|
| В | Quantity B is greater  |
| С | The two quantities are equal                                     |
| D | The relationship cannot be determined from the information given |

# Question 2

#### b < a < 1

| Quantity A | Quantity B |
|------------|------------|
| $a^3b^6$   | $b^6$      |

A Quantity A is greater

B Quantity B is greater

C The two quantities are equal

D The relationship cannot be determined from the information given

## Question 3

Jaqueline traveled from New York to Virginia in two legs of journeys. She traveled more miles in the first leg of journey than the second leg of the journey. She drove for 4 hours for the first leg of the journey and 3 hours for the second leg of the journey. Ignore any stoppage time between the two legs of journeys.

| Quantity A                                     | Quantity B                                      |
|--|---|
| Average speed for the first leg of the journey | Average speed for the second leg of the journey |

- A Quantity A is greater
- B Quantity B is greater
- C The two quantities are equal
- D The relationship cannot be determined from the information given

#### Question 4

| Quantity A                                      | Quantity B    |
|---|---------------|
| Maximum value of $\left[\frac{1}{4+y^2}\right]$ | $\frac{1}{4}$ |

- A Quantity A is greater
- B Quantity B is greater
- C The two quantities are equal
- D The relationship cannot be determined from the information given

#### Question 5

#### Area of a square equals the area of a circle.

| Quantity A              | Quantity B                  |
|-------------------------|-----------------------------|
| Perimeter of the square | Circumference of the circle |

| Α | Quantity A is greater  |
|---|--|
| В | Quantity B is greater  |
| С | The two quantities are equal                                     |
| D | The relationship cannot be determined from the information given |