

# BHARAT SCHOOL OF BANKING

## QUADRATIC EQUATION

- |                              |   |
|------------------------------|---|
| 1) (a) $3X^2+8X+4 = 0$       | (b) $4Y^2-19Y+12= 0.$                   |
| 2) (a) $X^2 + X-20= 0$       | (b) $Y^2-Y-30= 0.$                      |
| 3) (a) $X^2- 365 = 364$      | (b) $y- (324) ^{(1/2)} = (81)^{(1/2)}.$ |
| 4) (a) $225X^2-4 = 0$        | (b) $(225y)^{(1/2)} +2 = 0$             |
| 5) (a) $x^2 = 729$ and       | (b) $Y= (729)^{(1/2)}$                  |
| 6) (a) $2x^2 + 11x + 14 = 0$ | (b) $4y^2 + 12y +9 =0$                  |
| 7) (a) $x^2-7x+12=0$         | (b) $y^2+y-12=0$                        |
| 8) (a) $x^4- 227= 398$       | (b) $y^2 + 321=346$                     |
| 9) (a) $x^2-1=0$             | (b) $y^2+4y+3=0$                        |
| 10)(a) $x^2-7x+12=0$         | (b) $y^2-12y+32=0$                      |

Answers:

- 1) (iii)  $x < y$
- 2) (v) No relationship can be established between x and y
- 3) (iv)  $x \leq y$
- 4) (v) No relationship can be established
- 5) (iv)  $X \leq Y$
- 6) (iii)  $x < y$
- 7) (ii)  $X \geq Y$
- 8) (v) No relationship between X and Y.
- 9)(ii)  $X \geq Y$
- 10) (iv)  $x \leq y$

Q.1) Solution:-

Solving we get  $X= -2/3$  or  $-2$

$Y= 3/4$  or  $4$

Q.2) Solution:-

$X=4, -5$

$Y= -4, 6$

Q.3) Solution:-

$X= +27, -27$

$Y= +27$

Q.4) Solution:-

$X= +2/15$  and  $-2/15$

$Y= 4/225$

Comparing we get  $X>Y$  and  $X<Y$

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Hence, no relationship can be established

Q.5) Solution:-

$X=+27, -27$  and  $Y= +27$

Comparing we get  $X \leq Y$

Q.6) Solution:-

$X=-7/2$  or  $-2$

$Y=-3/2$

Q.7) Solution:-

$X=4,3$

$Y=-4,3$

So,  $X \geq Y$

Q.8) Solution:-

$X=+5,-5$  and  $Y= +5,-5$

Comparing, we get  $X=Y, X < Y, X > Y$ .

Therefore, no relationship can be established between  $X$  and  $Y$ .

Q.9) Solution:-

$X=+1,-1$  and  $Y= -1,-3$

Comparing we get  $X \geq Y$

Q.10) Solution:-

$X=3,4$  and  $Y= 4,8$

$X \leq Y$