

## Question 1

1 / 1 pts

If  $z = 3 - 2j$ , please give the value of  $zz^*$  where  $z^*$  is the conjugate of  $z$ .

☐ 5-12j

☐ 13-12j

☒ 13

☐ 5

## Question 2

1 / 1 pts

Find the rate of change of  $y(x) = 4 + 2x - 3x^2$  at  $x = 3$ .

☐ -12

☐ 12

☒ -16

☐ 16

### Question 3

1 / 1 pts

Express  $z = -1 - j$  in polar form.

☐  $\sqrt{2} \angle -45^\circ$

☒  $\sqrt{2} \angle -135^\circ$

☐  $\sqrt{2} \angle 135^\circ$

☐  $\sqrt{2} \angle 45^\circ$