Derivative-2

Write the equation of the tangent line to the function at the indicated domain value of the function.

1. $y = x^3 - 3x^2 + 2 \;\; at \;\; x = 3$

2. $y = x^3 - 2x^2 + 2 \;\; at \;\; x = 2$

3. $y = x^2 - 3 \;\; at \;\; x = -2$

4. $y = 6 - x^2 \;\; at \;\; x = -3$

5. $y = \sqrt{x} \;\; at \;\; x = 9$

6. $y = 2 - \dfrac{4}{x^2} \;\; at \;\; x = -2$

7. $y = x - \sqrt{x} \;\; at \;\; x = 4$

8. $y = 2x^3 + 3x^2 - 12x + 1 \;\; at \;\; x = -3$

Answer Key

1. $y = 9x - 25$

2. $y = 4x - 6$

3. $y = -4x - 7$

4. $y = 6x + 15$

5. $y = \frac{1}{6}x + \frac{3}{2}$

6. $y = -x - 1$

7. $y = \frac{3}{4}x - 1$

8. $y = 24x + 82$