

Name _____ **No calculators. Present neatly. Score** _____.

1)

Find the equations of all lines through the origin that are tangent to the curve $y = x^3 - 9x^2 - 16x$.

Your work:

Name_____ **No calculators. Present neatly. Score**_____.

1)

Find all values of x for which the tangent line to the curve
 $y = 2x^3 - x^2$ is perpendicular to the line $x + 4y = 10$.

Your work: