This assignment is graded based on correct answers.
However, there must be work/process shown
supporting your answer to receive credit.
Directions: Print out this worksheet and show ALL of your work in the box for each question. Highlight *your answers.*
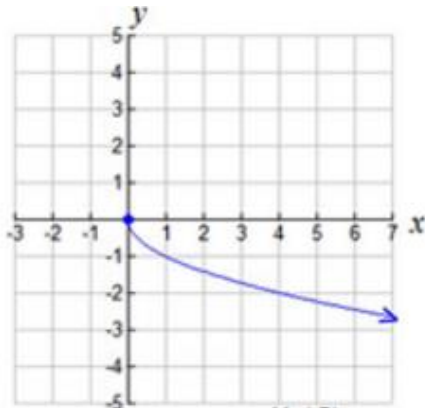
NO CALCULATOR

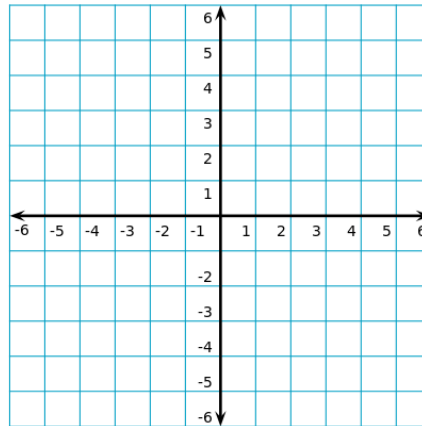|	
1) Factor completely: $3x^3 + x^2 - 3x - 1$	2) Find the vertex of $y = 4x^2 - 4x + 7$.
2) State the domain and range in ***set*** notation. Domain:_____ ***set*** notation Range:_____ ***set*** notation	4) Given $f(x) = 5 - x$ and $g(x) = x^2 + x - 4$ find $(f + g)(-2)$.

5) Solve. State the solution in interval notation. $$3(x-4) > 6 + 7(x+4)$$	6) Graph: $3x + 4y = 12$
7) Solve: $$x(x+2) = 3(x+5)$$	8) Evaluate: $-5^2 + 2(1-4)^2 - 3$
9) Given $y = 2(x+4)^2 - 9$. State the vertex. Then state the domain and range in ***interval*** notation. Vertex:_____ Domain:_____ ***interval*** notation Range:_____ ***interval*** notation	10) Simplify: $\sqrt{\dfrac{6}{9}}$