Algebra 1 ECA Remediation **Name** _____

Quiz 38.1

1. A baseball is thrown into the air and its height (h), in feet, can be modeled by the equation $h = -16t^2 + 29t + 6$, where t represents time in seconds.

   How many seconds will it take for the baseball to hit the ground (h=0) after it is thrown into the air?

   a) 6 seconds
   b) 2 seconds
   c) 0 seconds
   d) 29 seconds

2. Suppose a model rocket is launched from a platform 2 ft above the ground and its height (h) in feet can be modeled by the equation $h = -16t^2 + vt + c$, where t is the time in seconds after the rocket is launched, v is the initial upward velocity, and c is the starting height.

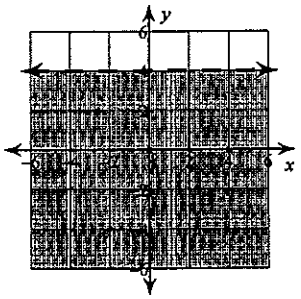
   Write an equation that can be used to find the height (h) of the rocket after t seconds if the initial upward velocity is 100 ft/sec.

   a) $h = -16t^2 + 2t - 100$
   b) $h = -16t^2 + 2t + 100$
   c) $h = -16t^2 + 100t + 2$
   d) $h = -16t^2 + 100t - 2$

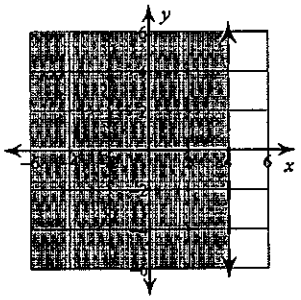
Sketch the graph of each linear inequality.

3. $y \leq -4$

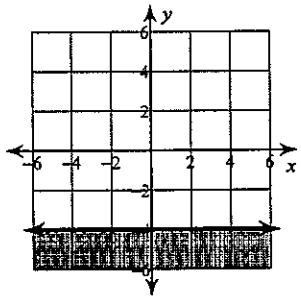
A)



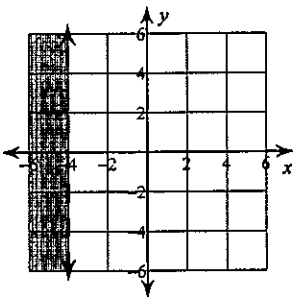
B)



C)



D)



Divide.

4. $(12r^5 + 2r^4 + 2r^3) \div 4r^3$

A) $r + 2 + \frac{1}{2r}$

B) $\frac{r^2}{2} + 5r + 3$

C) $\frac{r^2}{9} + \frac{r}{9} + 5$

D) $3r^2 + \frac{r}{2} + \frac{1}{2}$

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