Algebra 1 ECA Remediation **Name** _____

Quiz 38.2

1. A baseball is thrown into the air and its height (h), in feet, can be modeled by the equation $h = -16t^2 + 48t + 8$, 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) 0 seconds
   b) 48 seconds
   c) 8 seconds
   d) 3.2 seconds

2. Suppose a model rocket is launched from a platform 80 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.

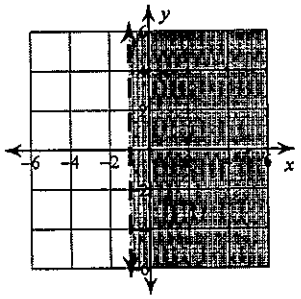
   Write an equation that can be used to find the height (h) of the rocket after t seconds if the initial upward velocity is 64 ft/sec.

   a) $h = -16t^2 + 64t + 80$
   b) $h = -16t^2 - 64t + 80$
   c) $h = -16t^2 + 80t + 64$
   d) $h = -16t^2 - 80t + 64$

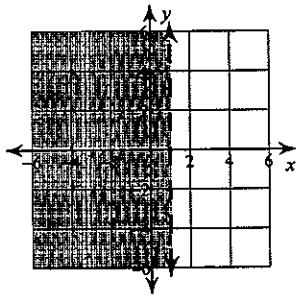
Sketch the graph of each linear inequality.

3. $x < -1$

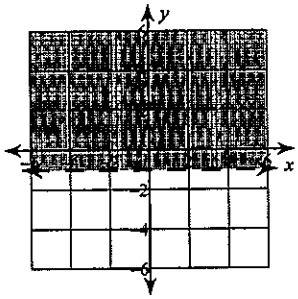
A)



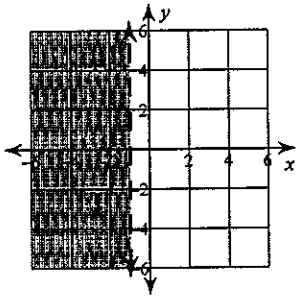
B)



C)



D)



Divide.

4. $(2n^5 + 20n^4 + 2n^3) \div 10n^2$

A) $\frac{1}{4} + \frac{4}{n} + \frac{5}{4n^2}$

B) $\frac{2n^2}{9} + 4n + \frac{1}{3}$

C) $\frac{n^3}{4} + \frac{n^2}{4} + n$

D) $\frac{n^3}{5} + 2n^2 + \frac{n}{5}$

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