# 5.1 & 5.2 Worksheet

Name_____

Date_____ Period____

**Solve each equation by factoring.**

1) $9x^2 = 24x - 12$

2) $4 = -9x - 2x^2$

3) $0 = -7x - 4x^2 + 2$

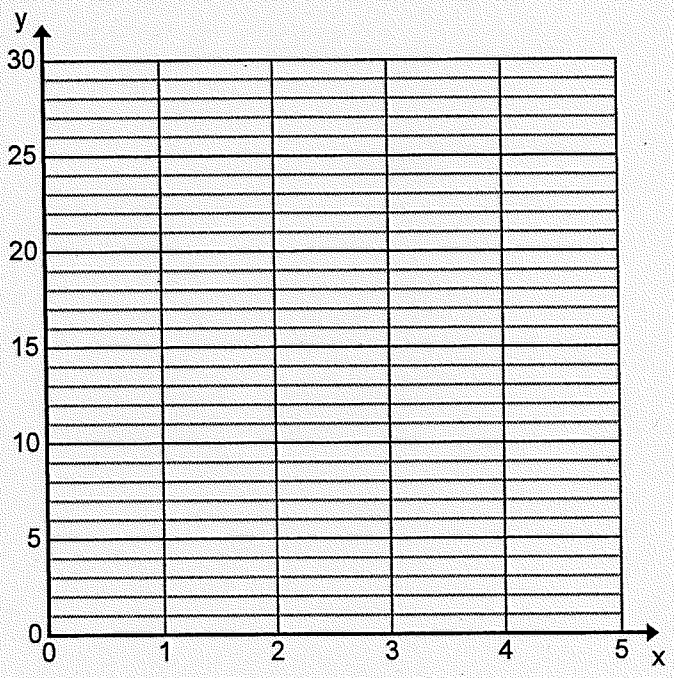
4) $6x^2 + 23x = -20$

5) $2x^2 - 20 = 3x$

6) $3 + 7x = -2x^2$

The arc of a basketball which is thrown at the goal (but missed) is modeled by the equation $f(x)=-16x^2 + 34x+6$ where x is time in seconds.

Graph: (Accurately)




Round to the nearest hundredth.

How high does the ball get?_____

How long does it take to get that high?_____

How long is the ball in the air?_____

What is the height of the ball after 1 second?_____