

# Math 121

HW #1 R1 #8, R2 #2

R3 #26 R4 #11 1.1 #20

R1 #8

$$(6k-1)(2k-3) = 12k^2 - 18k - 2k + 3 \\ = 12k^2 - 20k + 3$$

R2 #2

$$3y^3 + 24y^2 + 9y$$

$$= 3y(y^2 + 8y + 3)$$

↑ (can't factor any more)

R3 #26

$$\frac{3}{p} + \frac{1}{2} = \frac{6}{2p} + \frac{p}{2p} \\ = \frac{6+p}{2p}$$

R4 #11

$$m^2 = 14m - 49$$

$$m^2 - 14m + 49 = 0$$

$$(m-7)(m-7) = 0$$

$$m = 7$$

1.1 #20

line through (8, -1) and (4, 3)

point: (8, -1)

$$\text{slope: } \frac{8-4}{-1-3} = \frac{4}{-4} = -1$$

$$y - -1 = -1(x - 8)$$

$$y + 1 = -x + 8$$

$$\underline{y = -x + 7}$$