

**MAT 055 Practice Test Answer Key**  
**Chapter 13 Test**

1. GCF =  $3y$   
Factored =  $3y(2x^2 + x - 2y)$
2. GCF =  $13y^2$   
Factored =  $13y^2(y - 4)$
3. GCF =  $2y$   
Factored =  $2y(10y^3 + 4y^2 + 7y + 1)$
4.  $(x^2 + 6)(x + 2)$
5.  $(4y^2 + 5)(y - 3)$
6.  $(x - 3)(x + 7)$
7.  $(x^2 - 6)(x + 8)$
8.  $(x + 2)(x + 9)$
9.  $(y - 6)(y - 5)$
10.  $(n + 9)(n - 7)$
11.  $(z + 3)(z - 5)$
12.  $(9x + 2)(x + 2)$
13.  $(9x - 8)(x - 4)$
14.  $(7x + 8)(x - 7)$
15.  $4(2x - 1)(x + 5)$
16.  $(x - 12)(x + 12)$
17. "Prime"
18.  $(8y - 9)(8y + 9)$
19.  $(10 - z)(10 + z)$
20.  $(x + 15)^2$
21. "Prime"
22.  $5(x + 3)^2$
23.  $(8x - 7)^2$
24.  $(z + 7)(z^2 - 7z + 49)$
25.  $(x - 8)(x^2 + 8x + 64)$
26.  $(5y + 1)(25y^2 - 5y + 1)$
27.  $y = -17, 0$
28.  $y = \frac{8}{3}, \frac{6}{7}$
29.  $x = 0, 3$
30.  $y = -\frac{7}{6}, \frac{7}{6}$
31.  $x = -\frac{1}{6}, 7$
32.  $x = -5, 11$
- 33)  $132 = -16t^2 + 80t + 32$   
2 sec. ← answer
- 34) 19 mph (negative extraneous)