

MATH 100  
Review on Factoring

Key

Factor each polynomial completely.

(1)  $5x^2 - 10x$   
 $5x(x-2)$

(2)  $6x^2y^2 + 12xy^2 + 12y^2$   
 $6y^2(x^2 + 2x + 2)$

(3)  $3a^3b - 3ab^3$   
 $3ab(a^2 - b^2)$   
 $3ab(a+b)(a-b)$

(4)  $a^2 + 2a - 24$   
 $(a-4)(a+6)$

(5)  $4b^2 - 28b + 49$   
 $(2b-7)(2b-7)$   
OR  
 $(2b-7)^2$

(6)  $3m^3 + 27m$   
 $3m(m^2 + 9)$

(7)  $ax - ay + bx - by$   
 $(ax - ay) + (bx - by)$   
 $a(x - y) + b(x - y)$   
 $(x - y)(a + b)$

(8)  $6b^2 - 7b - 5$   
 $(2b + 1)(3b - 5)$

(9)  $2p^3 - 16$   
 $2(p^3 - 8)$   
 $2(p-2)(p^2 + 2p + 4)$

(10)  $2a^2 - 13a + 15$   
 $(a-5)(2a-3)$