

Algorithm-1.2-Extended-Euclidean-algorithm- page-15

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```
def extended_Euclidean(a,b):  
    s = 0  
    s_prime = 1  
    t = 1  
    t_prime = 0  
    r = b  
    r_prime = a  
    while (r != 0):  
        q = r_prime // r  
        remainder = r_prime % r  
        r_prime = r  
        r = remainder  
        count_s = s_prime - q*s  
        s_prime = s  
        s = count_s  
        count_t = t_prime - q*t  
        t_prime = t  
        t = count_t  
    d = r_prime  
    x = s_prime  
    y = t_prime  
    return (d,x,y)  
extended_Euclidean(7,5)  
(1, -2, 3)
```