

**9-4 Solving Quadratic Equations by Factoring**

Solve each equation by factoring. Show all your work clearly. Circle your answers.

1.  $(2a+1)(a-3)=0$

$2a+1=0$  or  $a-3=0$   
 $2a=-1$

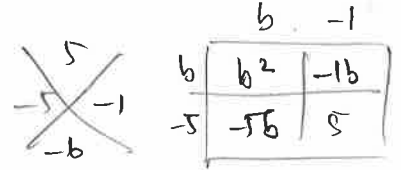
$a = -\frac{1}{2}$  or  $a = 3$

2.  $b^2-6b+5=0$

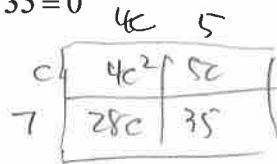
$(b-5)(b-1)=0$

$b-5=0$  or  $b-1=0$

$b = 5$  or  $b = 1$



3.  $4c^2+33c+35=0$

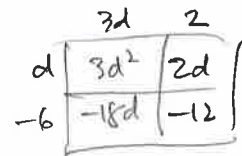
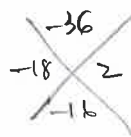


$(c+7)(4c+5)=0$

$c+7=0$  or  $4c+5=0$   
 $c=-7$  or  $4c=-5$   
 $c=-\frac{5}{4}$

$c = -7$  or  $c = -\frac{5}{4}$

4.  $3d^2-16d=12$      $3d^2-16d-12=0$



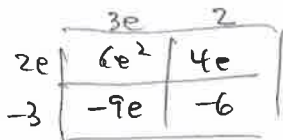
$(d-6)(3d+2)=0$

$d-6=0$  or  $3d+2=0$   
 $d=6$  or  $3d=-2$   
 $d=-\frac{2}{3}$

$d = 6$  or  $d = -\frac{2}{3}$

5.  $6e^2-5e=6$

$6e^2-5e-6=0$



$(2e-3)(3e+2)=0$

$2e-3=0$  or  $3e+2=0$

$2e=3$      $3e=-2$

$e = \frac{3}{2}$  or  $e = -\frac{2}{3}$