

## Factoring Homework 1

Name KEY

## Factor the Following Expressions

1)  $8a + 16$

$8(a+2)$

2)  $9a - 15$

$3(3a-5)$

3)  $-27c - 9d$

$-9(3c+d)$  or  
 $9(-3c-d)$

4)  $10v + 12u$

$2(5v+6u)$

5)  $-6xy + 10xyz$

$-2xy(3-5z)$  or  
 $2xy(-3+5z)$

6)  $10w + 50wy - 20wyz$

$10w(1+5y-2yz)$

7)  $12abc - 18ac + 14abc$

$2ac(6b-9+7b)$

8)  $-32mnp + 16mnp + 4mp$

$4mp(-8n+4n+1)$  or  
 $-4mp(8n-4n+1)$

9)  $-15ac - 12ab + 4a$

$a(-15c-12b+4)$  or  
 $-a(15c+12b-4)$

10)  $125xyz - 50yz + 75yz$

$25yz(5x-2+3)$

11) Circle ALL the expressions that are factors of the following:

$32abc - 16ac + 48abc$

a.  $2a$

b.  $4b$

c.  $12ac$

d.  $2ac$

e.  $8ac$

f.  $8abc$

g.  $4$

h.  $16$

i.  $32$

j.  $ac$