\section*{| Find the GCF |
| :---: |
| of a paire of |
| Monomials |
|  |}

Factor out the GCF in an expression

Factor out a COMMON linomial in an expression

# Greatest Common Factor of a Polynomial 

## Greatest Common Factor:

Recall 16:
40:

Find the GCF of each pair of monomials.
(1) $8 x^{3}$ and $27 x^{2}$

Factor out the GCF in each expression.
(3) $-14 x^{3}-18 x^{2}$

Factor out the common
binomial in each expression.
$54 x(x+5)-9(x+5)$
(2. $20 x^{4}$ and $45 x^{5}$
(4) $12 x^{3}-8 x^{2}+28 x$
(6) $2 x(x-3)+5(3-x)$

\section*{|  |
| :---: |
| Find the GCF |
| of a paire of |
| MONOMials |
|  |}

Factor out the GCF in an expression

Factor out a COMMON linomial in an expresSion

## Answer Key!

Greatest Common Factor

Greatest Common Factor: (GCF) The largest common factor of two or more given numbers.

Recall 16: 1, 2, 4, 8.) 16

$$
40: 1,2,4,5,8,10,20,40
$$

Find the GCF of each pair of monomials.
(1) $8 x^{3}$ and $27 x^{2}$ $9 x^{2}$

Factor out the GCF in each expression.
(3) $-14 x^{3}-18 x^{2}$
$-2 x^{2}(7 x+9)$

Factor out the common
binomial in each expression.
$54 x(x+5)-9(x+5)$

$$
(x+5)(4 x+9)
$$

(2) $20 x^{4}$ and $45 x^{5}$
$5 x^{4}$
(4) $12 x^{3}-8 x^{2}+28 x$
$4 x\left(3 x^{2}-2 x+7\right)$
(6) $2 x(x-3)+5(3-x)$
$(x-3)(2 x-5)$

## Directions:

Print pages $1 \& 2$ ( $3 \& 4$ for the answer key). On my printer, I use the option to print double- sided and to flip along the short edge. If you print single-sided and then photocopy, be sure to manually flip the second page before putting it into the copy machine.

Fold the top and bottom into the solid line that runs horizontally. Then, cut along the dashed line to create three tabs at the bottom.

The final product should look like this:


