## FACTORING WITH GREATEST COMMON FACTOR

A greatest common factor is the $\qquad$ term that $\qquad$ evenly into a set of terms.

Find the prime factorization of 8
Find the prime factorization of 12


What is the greatest common factor of 8 and $12 ?$

Find the greatest common factor in each of the following.

| 1) 6 and 18 | GCF = | 2) $x^{5}$ and $x^{3}$ | GCF = |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| 3) $16 \mathrm{~m}^{2}$ and $20 \mathrm{~m}^{3}$ |  | 4) $56 \mathrm{c}^{2}$ and 32c |  |
|  | GCF = |  | GCF = |

## MULTIPLY: $4 x(x+5)=$

FACTORING is $\qquad$ .

Factor.

| 5) $4 x^{2}-3 x=\ldots$ | 6) $24 x^{2}+6 x=\ldots$ |
| :--- | :--- |
| 7) $12 a^{3}-16 a^{2}=\ldots$ | 8) $10 y^{3}+20 y^{2}-5 y=$ |
| 9) $16 x^{3}-8 x^{2}-4 x=\ldots$ |  |

