The greatest common factor (GCF) of a set of terms is:

Example 1: Identify the GCF of the following terms.
a) 4, 8, 12   GCF =

b) 28k, $14k^2$, $21k^3$ GCF =

c) p^7q^8, p^3q^6, p^5q^2 GCF =

d) $9x^3y^4$, $18x^6y^7$, $6x^7y^2$ GCF =

To common factor ...

Example 2: Common factor each polynomial.
a) 6x + 30   b) $x^2 - x$

c) $2a^2 - 10a$
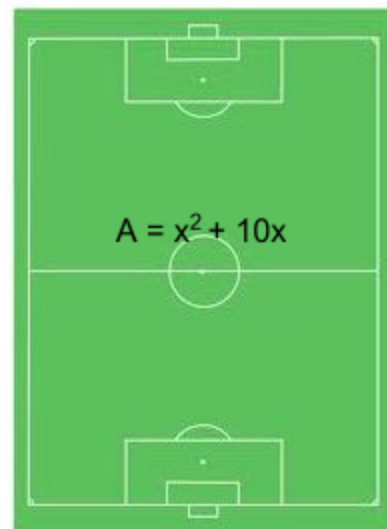
d) $10p^4 - 15p^3 - 5p^2$

e) $m^3n^2 - mn^4 - m^5n$

f) $49xy^2z + 14x^2yz^2 - 35xyz$

Example 3: A soccer field has the area shown.
a) Find the length and width of the soccer
field by factoring the area expression.

$A = x^2 + 10x$

b) Find the length and width of the soccer
field if x = 2 m.

c) Find the perimeter of the field.

Homework: Handout