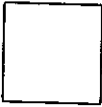




4. Factor each trinomial.

a)  $4x^2 + 8x + 2$

Since all the terms are positive, use algebra tiles.

Use , , and .

Since \_\_\_\_\_ is the GCF of 4, 8, and 2, arrange the tiles in \_\_\_\_\_ equal groups.  
Sketch the tiles.

There are \_\_\_\_\_ equal groups, so \_\_\_\_\_ is one factor.

Each group models \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_,  
so this polynomial is the other factor.

So,  $4x^2 + 8x + 2 =$  \_\_\_\_\_

b)  $-15a^2 + 10a - 30$

Factor each term of the trinomial.

The GCF is \_\_\_\_\_.

Divide each term of the trinomial by \_\_\_\_\_.

Remove  $-1$  as a common factor.

So,  $-15a^2 + 10a - 30 =$  \_\_\_\_\_

c)  $24n^2 - 16n - 8$

So,  $24n^2 - 16n - 8 =$  \_\_\_\_\_