

# Greatest Common Factor



# a) What is a factor?

## b) A factor is also...



## List all the factors of 18

## List all the factors of 12

## What is the <u>GREATEST COMMON</u> <u>FACTOR</u> between 18 and 12?



#### Find the GCF using the listing method.

1) 15 and 25

2) 24 and 36



#### Find the GCF using the listing method.

3) 3 and 7

4) 16, 24, 40



#### Find the GCF using the prime factorization method.

5) 20 and 45



#### Find the GCF using the prime factorization method.

6) 12 and 56



#### Find the GCF using the prime factorization method.

9) 90 and 32



#### Find the GCF using the Venn Diagram method.

#### 10) 18 and 12





#### Find the GCF using the Venn Diagram method.

#### 11) 90 and 32





#### Find the GCF using the mental method.

12) 16 and 24

13) 6 and 24

### **Real-Life Application 1**



You are filling piñatas for your sister's birthday party. The list shows the gifts you are putting into the piñatas. You want identical groups of gifts in each piñata with no gifts left over. What is the greatest number of piñatas you can make?

### **Real-Life Application**

You are arranging your collection of DVDs into stacks. You have 16 drama, 32 action, and 40 comedy DVDs. You want all of the stacks to be the same height. What is the greatest number of DVDs you can have in a stack to make them the same height, without any left over?