

## Apache Commons Collections Equivalents

### CollectionUtils (source)

CollectionUtils	Guava
<code>void addAll(Collection, Enumeration)</code>	<code>Iterators.addAll(collection, Iterators.forEnumeration(enumeration))</code>
<code>void addAll(Collection, Iterator)</code>	<code>Iterators.addAll(collection, iterator)</code>
<code>void addAll(Collection, Object[])</code>	<code>Collections.addAll(collection, array)</code> (JDK)
<code>boolean addIgnoreNull(Collection, Object)</code>	<code>if (o != null) { collection.add(o); }</code>
<code>int cardinality(Object, Collection)</code>	<code>Iterables.frequency(collection, object)</code>
<code>Collection collect(Collection, Transformer)</code>	<code>newArrayList(Collections2.transform(collection, function))</code>
<code>Collection collect(Collection, Transformer, Collection)</code>	<code>output.addAll(Collections2.transform(collection, function))</code>
<code>Collection collect(Iterator, Transformer)</code>	<code>newArrayList(Iterators.transform(iterator, function))</code>
<code>Collection collect(Iterator, Transformer, Collection)</code>	<code>Iterators.addAll(output, Iterators.transform(input, function))</code>
<code>boolean containsAny(Collection coll1, Collection coll2)</code>	<code>!Collections.disjoint(coll1, coll2)</code> (JDK)
<code>int countMatches(Collection, Predicate)</code>	<code>Iterables.size(Iterables.filter(collection, predicate))</code>
<code>Collection disjunction(Collection, Collection)</code>	<code>Sets.symmetricDifference(set1, set2)</code>
<code>boolean exists(Collection, Predicate)</code>	<code>Iterables.any(collection, predicate)</code>

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<code>void filter(Collection, Predicate)</code>	<code>Iterables.removeIf(collection, not(predicate))</code> (see also <code>Iterables.transform</code> , which creates a view instead of mutating the input)
<code>Object find(Collection, Predicate)</code>	<code>Iterables.find(collection, predicate)</code>
<code>void forAllDo(Collection, Closure)</code>	for (Object o : collection) { closure.execute(o); }
<code>Object get(Object, int)</code>	<code>Iterables.get(o, index)</code> , supplemented with calls to <code>entrySet()</code> , <code>forEnumeration()</code> , etc.
<code>Map getCardinalityMap(Collection)</code>	<code>ImmutableMultiset.copyOf(collec</code>

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Object index(Object, int)	Iterables.get(o, index), sup- ple- mented with calls to keySet(), forEnumeration(), etc.
Object index(Object, Object)	Iterables.get(o, index), sup- ple- mented with calls to entrySet(), forEnumeration(), etc.
Collection intersection(Collection, Collection)	Sets/Multisets.intersection(a, b)
boolean isEmpty(Collection)	collection == null
boolean isEqualCollection(Collection, Collection)	If both are Sets or Multisets, use equals(); other- wise ImmutableMultiset.copyOf(a).equals(b)
boolean isFull(Collection)	No equiv- a- lent-no BoundedCollection type.

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<code>boolean isEmpty(Collection)</code>	<code>collection</code> <code>!=</code> <code>null</code> <code>&amp;&amp;</code> <code>!collection.isEmpty()</code>
<code>boolean isProperSubCollection(Collection, Collection)</code>	No equiv- a- lent-check that <code>a.size()</code> < <code>b.size()</code> and then use the check de- scribed be- low.
<code>boolean isSubCollection(Collection, Collection)</code>	<code>Multisets.containsOccurrences(I</code> <code>ImmutableMultiset.copyOf(coll2)</code>
<code>int maxSize(Collection)</code>	No equiv- a- lent-no <code>BoundedCollection</code> type.
<code>Collection predicatedCollection(Collection, Predicate)</code>	<code>Constraints.constrainedCollecti</code>
<code>Collection removeAll(Collection, Collection)</code>	<code>newArrayList(Iterables.filter(c</code> <code>Predicates.not(Predicates.in(re</code>
<code>Collection retainAll(Collection, Collection)</code>	<code>newArrayList(Iterables.filter(c</code> <code>Predicates.in(retain))</code>

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<code>void reverseArray(Object[])</code>	<code>Lists.reverse(Arrays.asList(arr</code> (re- turns an in- verse List view with- out modi- fying ar- ray)
<code>Collection select(Collection, Predicate)</code>	<code>newArrayList(Iterables.filter(c</code> predicate))
<code>void select(Collection, Predicate, Collection)</code>	<code>Iterables.addAll(output,</code> <code>Iterables.filter(input,</code> predicate))
<code>Collection selectRejected(Collection, Predicate)</code>	<code>newArrayList(Iterables.filter(c</code> Predicates.not(predicate)))
<code>void selectRejected(Collection, Predicate, Collection)</code>	<code>Iterables.addAll(output,</code> <code>Iterables.filter(input,</code> Predicates.not(predicate)))
<code>int size(Object)</code>	<code>Collection/Map.size(),</code> array.length, Iterables/Iterators.size (with forEnumeration() if neces- sary)
<code>boolean sizeIsEmpty(Object)</code>	<code>Collection/Map.isEmpty(),</code> array.length == 0, Iterables/Iterators.isEmpty (with forEnumeration() if neces- sary)

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Collection subtract(Collection, Collection)	No equiv- a- lent-create an <b>ArrayList</b> con- tain- ing <b>a</b> and then call <b>remove</b> on it for each ele- ment in <b>b</b> .
Collection synchronizedCollection(Collection)	<b>Collections.synchronizedCollect</b> (JDK)

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void transform(Collection, Transformer)	No equiv- alent for trans- form- ing a <b>Collection</b> in place... not very use- ful. Pre- fer trans- formed views (Lists/Collections2.transform) or copies of them.

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Collection transformedCollection(Collection, Transformer)	No equiv- alent for trans- form- ing Objects that are added to a Collection... a ForwardingCollection could easily han- dle this, though.
Collection typedCollection(Collection, Class)	Collections.checkedCollection/S (JDK)
Collection union(Collection, Collection)	Sets.union(a, b)
Collection unmodifiableCollection(Collection)	Collections.unmodifiableCollect (JDK) Con- sider ImmutableCollection types if you want im- mutabil- ity.