

## Dense linear orders [edit](#)

**Definition 1.** A *dense linear order* is a Chains  $\mathbf{D} = \langle D, \leq \rangle$  such that

$\leq$  is *dense*:  $x < y \implies \exists z(x < z, z < y)$

Remark:

**Morphisms.** Let  $\mathbf{C}$  and  $\mathbf{D}$  be dense linear orders. A morphism from  $\mathbf{C}$  to  $\mathbf{D}$  is a function  $h : C \rightarrow D$  that is a orderpreserving:

$x \leq y \implies h(x) \leq h(y)$

**Basic Results.**

**Examples.**

1.

**Properties.** (description)

Classtype	first-order
Quasiequational theory	
First-order theory	
Amalgamation property	
Strong amalgamation property	
Epimorphisms are surjective	

**Finite Members.**  $f(n)$  = number of members of size  $n$ .

*None*

**Subclasses.**

Dense linear orders without endpoints

**Superclasses.**

Chains

## REFERENCES

[1]