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### 12.8 Congruent and Similar Solids

G.TS. 3 Know properties of congruent and similar solids, including prisms, regular pyramids, cylinders, cones, and spheres; solve problems involving congruent and similar solids.

Similar Solids $\Rightarrow$ have the same shape, but not necessary the same size

Congruent Solids $\Rightarrow$ have exactly the same size and shape

Congruent solids are similar solids that have a scale factor of 1:1.

## Concept Summary

Two solids are similar if they have the same shape and the ratios of their corresponding linear measurements are equal.

Models

$\frac{h_{1}}{h_{2}}=\frac{r_{1}}{r_{2}}$

## Ex 1:

Determine whether each pair of solids is similar, congruent, or neither. If the solids are similar, state the scale factor.
a)


b)



