6.8 Enlargements



6.9 Similar Triangles (Theorem 13)



scale factor = 2(The triangle is twice bigger.)

Two triangles are said to be 'similar' if they have three common angles. The lengths of the sides can be different, but you will find that the ratios of the sides are proportional.



These triangles $\triangle ABC$ and $\triangle AB'C'$ are all 'similar' to one another. [Prove it to yourself by measuring the lengths of the sides with a ruler. You will see that they are always proportional.] Sometimes it can be hard to spot this. A tell-tale sign, is to see if there is a common angle. If you can see that, this means that one of the conditions is there for the triangles to be 'similar'.

'Congruent' triangles are also 'similar'.

```
Scale factor = 1.
```

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