## Name:

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## Similar Triangles

1) Prove that $\square B A C \square D E C$

2) Prove that $\square M L K \square \cap O K$

3) Prove that any two equilateral triangles are similar.
4) Prove that any two regular polygons that have the same number of sides are similar.
5) In $\square A B C$, the midpoint of $\overline{A C}$ is M and the midpoint of $\overline{B C}$ is N .
6) Show that $\square A B C \sqcup \square M N C$.
7) What is their ratio of similitude?
8) In $\square A B C$, the midpoint of $\overline{A C}$ is M , the midpoint of $\overline{B C}$ is P , the midpoint of $\overline{B C}$ is N , and the midpoint of $\overline{N C}$ is Q .
9) Show that $\square A B C \sqcup \square P Q C$
10) What is their ratio of similitude?
