## Practice with Similar Triangles

Ex. 1: Practice with AA: Determine if the two triangles are similar by $A A$.
a. $\triangle A B E$ and $\triangle A C D$
b. $\triangle \mathrm{DEC}$ and $\triangle \mathrm{GHK}$
c. $\triangle \mathrm{CDE}$ and $\triangle \mathrm{BDA}$


Ex. 2: Practice with SSS: Determine which triangle is similar to $\triangle A B C$ by SS. Write a similarity statement and find the scale factor?


Ex. 3: Practice with SAS: Determine if the two triangles are similar by SAS.
a. $\Delta \mathrm{LNM}$ and $\Delta \mathrm{JNK}$

b. $\triangle C D B$ and $\triangle C E A$


Ex. 4: Mixed Practice: Determine whether the triangles are similar. If they are, state what postulate or theorem you used and write a similarity statement.
1.)





Show that the two triangles are similar. Write a similarity statement.
4.) $\triangle A B E$ and $\triangle A C D$

6.) $\triangle \mathrm{SRT}$ and $\triangle \mathrm{PNQ}$


5.) $\Delta \mathrm{SVR}$ and $\triangle U V T$

7.) $\Delta H G J$ and $\Delta H F K$

8.) A flagpole casts a shadow that is 50 feet long. At the same time, a woman standing nearby who is five feet four inches tall casts a shadow that is 40 inches long. How tall is the flagpole to the nearest foot?
9.) Find the value of $x$ that makes $\triangle A B C \sim \triangle D E F$.


KEY CONCEPT: If 2 triangles are $\qquad$ , then they are
$\qquad$ .

As a result, the scale factor will be $\qquad$ .

