1. $\triangle ABC$ is dilated from center A by a factor not equal to 1 to form $\triangle AKL$. Which of the statements must be true?

Select **all** that apply.

☐ A. $\overline{AB}$ and $\overline{AK}$ lie on the same line.

☐ B. The line containing $\overline{BC}$ is parallel to the line containing $\overline{KL}$.

☐ C. $\angle ABC \cong \angle ACB$

☐ D. $\angle ABC \cong \angle AKL$

☐ E. $\triangle ABC \sim \triangle AKL$

☐ F. $\triangle ABC \cong \triangle AKL$

2. A square has sides that are each 90 feet long. Which equations can be used to calculate d, the length of a diagonal of the square, in feet?

Select **all** that apply.

☐ A. $d = \frac{1}{2}(90 \times 90)$

☐ B. $d = \sqrt{90^2 + 90^2}$

☐ C. $d = \sqrt{4 \times 90^2}$

☐ D. $\cos 45° = \frac{90}{d}$

☐ E. $\sin 45° = \frac{90}{d}$

☐ F. $\tan 45° = \frac{90}{d}$

3. Select from the drop-down menus to correctly complete each sentence.

The set of all points in a plane that are equidistant from a given point is called a

Choose… ▶
square
sphere
segment
circle

The given point is called the

Choose… ▶
square
sphere
segment
circle