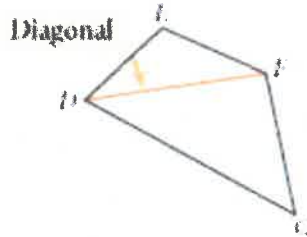


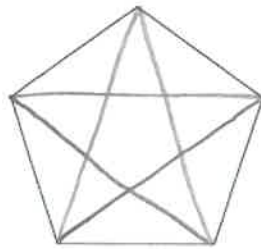
Diagonal: line segment that connects 2 nonconsecutive vertices



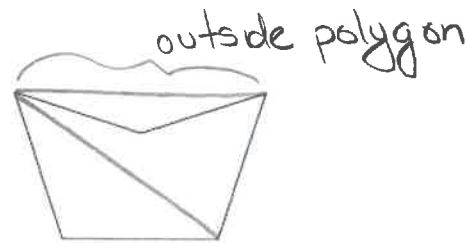
Convex: no diagonal is outside polygon

Concave: at least one diagonal is outside polygon

↓
caves into
shape
⇒ dent in
object



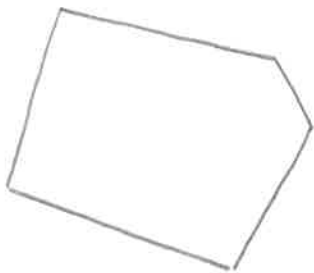
convex polygon



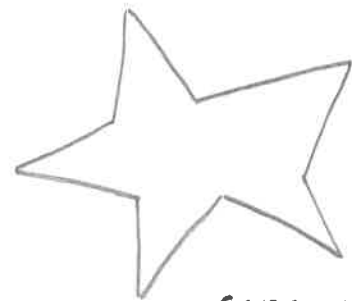
concave polygon

Determine which of the following are convex or concave:

Convex

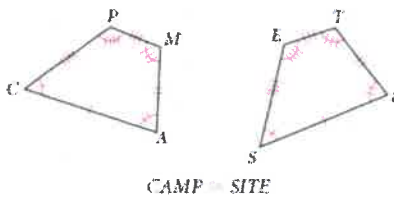


convex



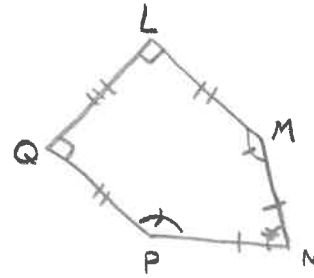
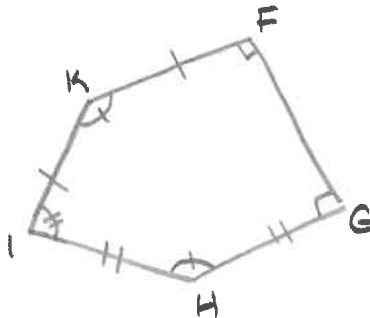
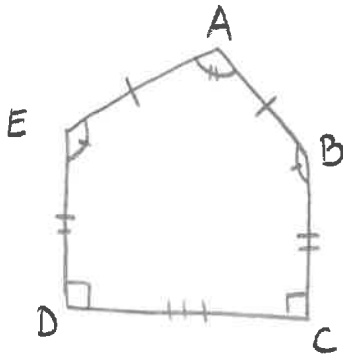
concave

***Polygons are congruent ONLY when all the angles and sides are congruent.**



CAMP = SITE

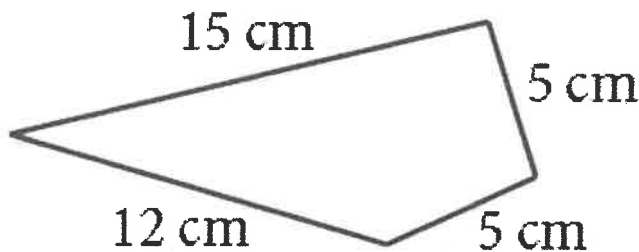
1. Which polygon is congruent to $ABCDE$?



$\underline{ABCDE} \cong \underline{NPQLM}$

Perimeter equals the sum of the lengths of its sides

1. Find the perimeter of the polygon below:



$P = 5 + 5 + 15 + 12$
 $= 37 \text{ cm}$

Letters must match w/ matching notation
 $\angle A \cong \angle N$
could have named
 $ABCDE \cong NMLQP$
b/c
 $\angle B \cong \angle P$ and $\angle M$
 $\angle C \cong \angle L$ and $\angle Q$

Equilateral Polygon: all sides are equal length



Equiangular Polygon: all angles have equal measure

