Similarities and Isometries - Supplemental Question 1 with Solutions

In which set of figures below are the triangles not similar?

Compare "like sides.
A)

$\frac{1.5}{0.75}=2$
$\frac{1.8}{0.9}=2 \quad=$ Similar by SSS
$\frac{2.4}{1.2}=2$

$180^{\circ}-85^{\circ}-33^{\circ}=62^{\circ}$
Could have been similar
by AA but $62^{\circ} \neq 52^{\circ}$
so not similar.
C)


Similar by SAS.
Two sides and an enclosed angle that is congruent.
D) Central angle is identical (vertically opposite)


$$
\begin{aligned}
& \frac{6}{4}=1.5 \\
& \frac{9}{6}=1.6
\end{aligned}
$$

$\therefore$ Similar by SAS

