***** **NO CALCULATORS IN THIS ROUND** *****

ANSWERS

A) _____

B) _____

C) _____ °

A) The measures of the vertex and base angles of an isosceles triangle are in a 4 : 3 ratio.
   If the vertex angle is the larger of these two angles, compute the measure of an
   exterior angle at the base.

B) A regular polygon has 740 diagonals.
   How many degrees in an exterior angle of this polygon?

C) $\overleftrightarrow{CD} \| \overleftrightarrow{EF}$ and $\overleftrightarrow{AB}$ is a transversal intersecting $\overleftrightarrow{CD}$ and $\overleftrightarrow{EF}$
   in points M and N respectively.
   P is a point between the parallel lines such that
   $\qquad m\angle NMP = 3m\angle PMD$
   $\qquad m\angle MNP = 4m\angle PNF$
   If $m\angle AMD = (7x - 40)°$ and $m\angle MNF = (5x)°$,
   find $m\angle P$.