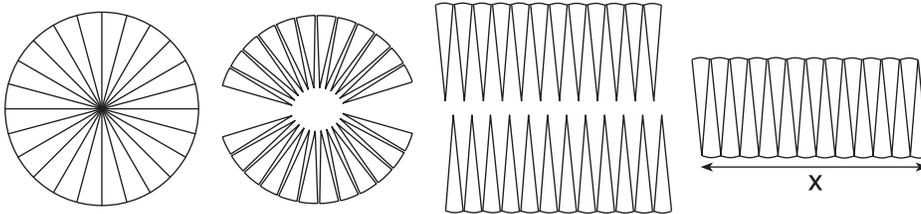


Use this space for computations.

22 The line $3y = -2x + 8$ is transformed by a dilation centered at the origin. Which linear equation could be its image?

- (1) $2x + 3y = 5$ (3) $3x + 2y = 5$
 (2) $2x - 3y = 5$ (4) $3x - 2y = 5$

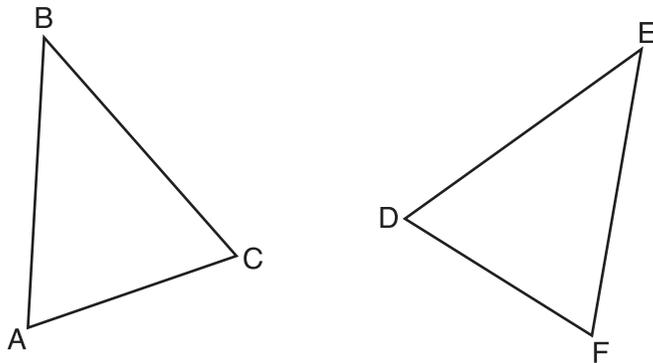
23 A circle with a radius of 5 was divided into 24 congruent sectors. The sectors were then rearranged, as shown in the diagram below.



To the nearest integer, the value of x is

- (1) 31 (3) 12
 (2) 16 (4) 10

24 Which statement is sufficient evidence that $\triangle DEF$ is congruent to $\triangle ABC$?

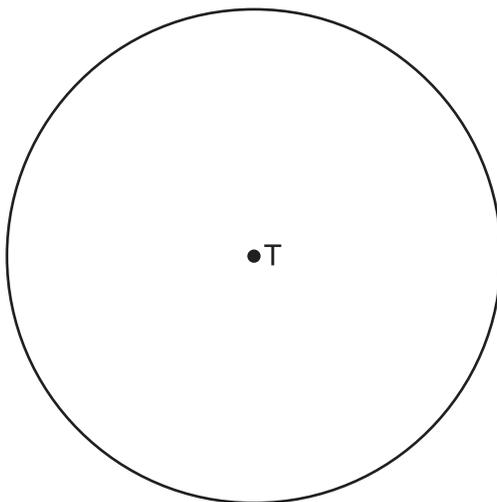


- (1) $AB = DE$ and $BC = EF$
 (2) $\angle D \cong \angle A$, $\angle B \cong \angle E$, $\angle C \cong \angle F$
 (3) There is a sequence of rigid motions that maps \overline{AB} onto \overline{DE} , \overline{BC} onto \overline{EF} , and \overline{AC} onto \overline{DF} .
 (4) There is a sequence of rigid motions that maps point A onto point D , \overline{AB} onto \overline{DE} , and $\angle B$ onto $\angle E$.

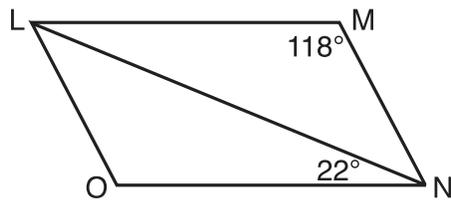
Part II

Answer all 7 questions in this part. Each correct answer will receive 2 credits. Clearly indicate the necessary steps, including appropriate formula substitutions, diagrams, graphs, charts, etc. Utilize the information provided for each question to determine your answer. Note that diagrams are not necessarily drawn to scale. For all questions in this part, a correct numerical answer with no work shown will receive only 1 credit. All answers should be written in pen, except for graphs and drawings, which should be done in pencil. [14]

- 25 Use a compass and straightedge to construct an inscribed square in circle T shown below.
[Leave all construction marks.]



- 26** The diagram below shows parallelogram $LMNO$ with diagonal \overline{LN} , $m\angle M = 118^\circ$, and $m\angle LNO = 22^\circ$.



Explain why $m\angle NLO$ is 40 degrees.