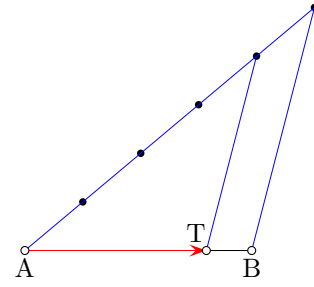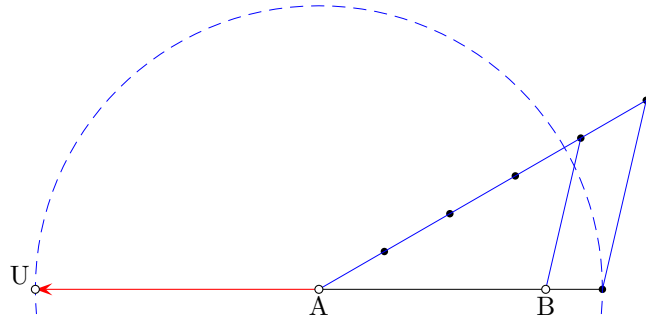**6.9**   1) $\overrightarrow{AT} = \frac{4}{5}\overrightarrow{AB}$

2) $\overrightarrow{AU} = -\frac{5}{4}\overrightarrow{AB}$

3) $\overrightarrow{RA} = 3\overrightarrow{AB} \iff \overrightarrow{AR} = -3\overrightarrow{AB}$

4) $\overrightarrow{SA} = -2\overrightarrow{AB} \iff \overrightarrow{AS} = 2\overrightarrow{AB}$