## Student Activity Theorem 10

## Use in connection with interactive file "Theorem 10" on the Student's CD.



1. $A B C D$ is a parallelogram. Drag the point $D$ to the left and then write down the lengths of the following line segments
[AE] = $\qquad$
[EC] = $\qquad$
[DE] = $\qquad$
[EB] = $\qquad$
Is the length of $[A E]=$ the length of $[E C]$ ? $\qquad$
Is the length of $[D E]=$ the length of $[E B]$ ? $\qquad$
2. $A B C D$ is a parallelogram. Drag the point $A$ to the right and then write down the lengths of the following line segments
[AE] = $\qquad$
[EC] = $\qquad$
[DE] = $\qquad$
[EB] = $\qquad$
Is the length of $[A E]=$ the length of $[E C]$ ? $\qquad$
Is the length of $[D E]=$ the length of $[E B]$ ? $\qquad$
3. $A B C D$ is a parallelogram. Drag the point $A$ to make the length of $[A E]=3$

Is the length of $[A E]=[E C]$ ? $\qquad$
Is the length of $[D E]=[E B]$ ? $\qquad$
4. Write down in your own words what conclusion can be drawn from the answers to questions 1, 2 and 3 $\qquad$
5. Click on the Tick Box on the interactive file to reveal the wording of this theorem.

Did you come to this conclusion? $\qquad$ .

