

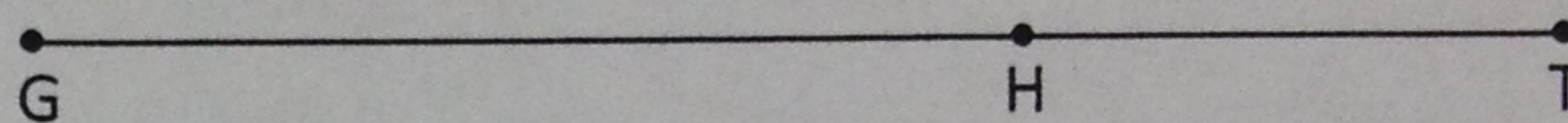
Name: \_\_\_\_\_ Period: \_\_\_\_\_

## Segment Addition Postulate

Use the line on the right to answer numbers 1-5.

1. Let  $GH = 45$  in. and  $HT = 15$  in. Find  $GT$ .

2. Let  $GT = 37$  cm and  $HT = 17$  cm. Find  $GH$ .



3. Let  $HT = 14$  ft and  $GH = 36$  ft. Find  $GT$ .

4. Let  $TG = 100$  in. and  $GH = 60$ . Find  $HT$ .

5. Let  $GT = 34$  m and  $HT = 20$  m. Find  $GH$ .

6. Let  $\overline{XY} = 15$ ,  $\overline{XZ} = 45$ , and  $\overline{YZ} = 3t - 3$ .  
Solve for  $t$ .

7. Let  $\overline{XZ} = 32$ ,  $\overline{YZ} = 7$ , and  $\overline{XY} = 5z - 5$ . Find  
the value of  $z$ .

8. Let  $\overline{XY} = 12$ ,  $\overline{YZ} = 78$ , and  $\overline{XZ} = 25w - 10$ .  
Find the value of  $w$ .