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## Puzzle Time

## Why Did The Queen Have The King Measure The Rug?

Circle the letter of each correct answer in the boxes below. The circled letters will spell out the answer to the riddle.

Point $B$ is between points $A$ and $C$ on $\overline{A C}$. Use the information to find the value of $x, A B$, and $B C$.

1. $A C=95, A B=15 x-10, B C=5 x+5$
2. $A C=8 x-16, A B=3 x-8, B C=4 x$
3. $A C=x-0.4, A B=x-4.9, B C=0.5 x$
4. $A C=38 \frac{3}{4}, A B=6 x, B C=8 x+\frac{1}{4}$
5. Line segments that have the same length are called similar segments. True or false?
6. The length of a horizontal segment is the absolute value of the difference of the $x$-coordinates of the endpoints. Yes or no?
7. Points on a line can be matched with real numbers. Correct or incorrect?

| $\mathbf{B}$ | $\mathbf{A}$ | $\mathbf{H}$ | $\mathbf{C}$ | $\mathbf{E}$ | $\mathbf{L}$ | $\mathbf{A}$ | $\mathbf{U}$ | $\mathbf{W}$ | $\mathbf{I}$ | $\mathbf{A}$ | $\mathbf{I}$ | $\mathbf{H}$ | $\mathbf{N}$ | $\mathbf{E}$ | $\mathbf{S}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| no | true | 9 | 19 | 16 | $\frac{1}{2}$ | 7 | 1 | 65 | incorrect | 5 | $\frac{1}{2}$ | 0.3 | 6 | 1.9 | 30 |
| $\mathbf{A}$ | $\mathbf{M}$ | $\mathbf{G}$ | $\mathbf{I}$ | $\mathbf{O}$ | $\mathbf{F}$ | $\mathbf{O}$ | $\mathbf{I}$ | $\mathbf{D}$ | $\mathbf{R}$ | $\mathbf{E}$ | $\mathbf{U}$ | $\mathbf{L}$ | $\mathbf{N}$ | $\mathbf{E}$ | $\mathbf{R}$ |
| $22 \frac{1}{4}$ | $11 \frac{1}{2}$ | 4.1 | $\frac{1}{2}$ | $16 \frac{1}{2}$ | $\frac{3}{8}$ | 4.5 | 5.5 | 32 | 8 | 63 | $2 \frac{3}{4}$ | false | 2 | yes | correct |

