**6**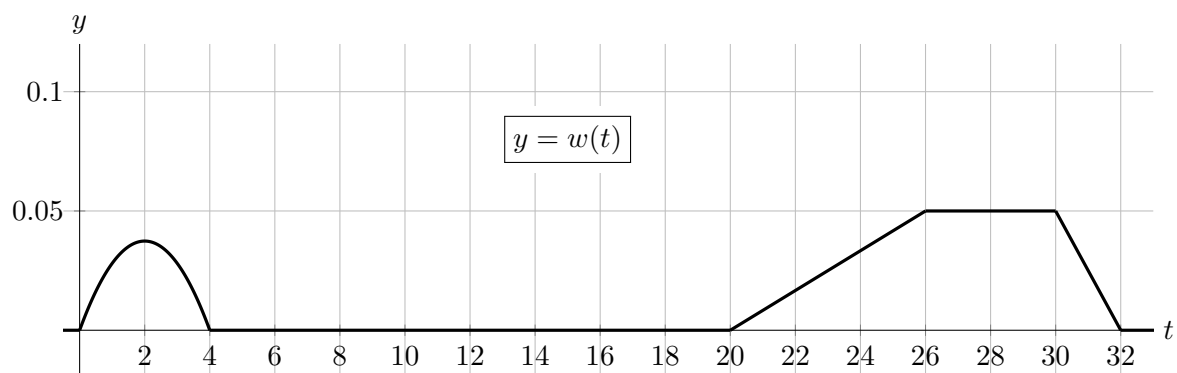. [9 points]  As part of his exercise routine, a man goes for walks of various lengths of time. The lengths of the man's walks, where $t$ is measured in minutes, are described by the density function $w(t)$. A boxed portion of the graph of $w(t)$ is shown below.



**a**. [3 points] Complete the following English sentence:

*The fraction of the man's walks that are between 20 and 28 minutes long is . . .*

**b**. [3 points] Circle the ONE sentence below that BEST corresponds to the mathematical statement $w(3) \approx 0.028$.

i. Approximately 3% of the man's walks last between 0.028 and 1.028 minutes.

ii. Approximately 1.4% of the man's walks last between 3 and 3.5 minutes.

iii. Approximately 28% of the man's walks last between 3 and 4 minutes.

iv. Approximately 2.8% of the man's walks last exactly 3 minutes.

v. Approximately 3% of the man's walks last approximately 2.8 minutes.

**c**. [3 points] Does the man take any walks that last longer than 32 minutes? Explain.

*Circle one:*          YES          NO          NOT ENOUGH INFORMATION

**Explanation:**