

Warm Up 4.3

**Find your classwork
from last time!**

Rashid also has a route he likes to do on his own and has the following continuous piecewise function to represent the average distance he travels in minutes:

$$f(x) = \begin{cases} \frac{1}{4}(x) & 0 < x \leq 20 \\ \frac{1}{5}(x - 20) + 5 & 20 < x \leq 50 \\ \frac{2}{7}(x - 50) + 11 & 50 < x \leq 92 \\ \frac{1}{8}(x - a) + b & 92 < x \leq 100 \end{cases}$$

11. Find the value of a
12. Find the value of b
13. Sketch a graph of the bike ride as a function of distance traveled as a function of time.

Use the following continuous piecewise-defined function to answer the following questions.

$$f(x) = \begin{cases} \frac{1}{4}x^2 & 0 < x \leq 10 \\ \frac{1}{2}(x - 10) + c & 10 < x \leq 20 \\ 2(x - 20) + 30 & 20 < x \leq 30 \end{cases}$$

14. Find the value of c .
15. Sketch the graph.
16. What is the domain of $g(x)$?
17. What is the range of $g(x)$?
18. Find $f(8)$.
19. Find $f(15)$.