19.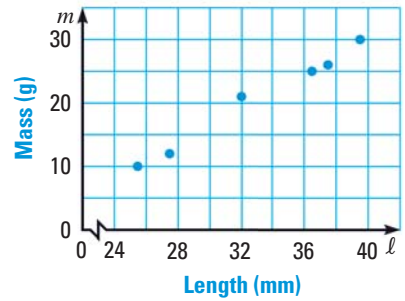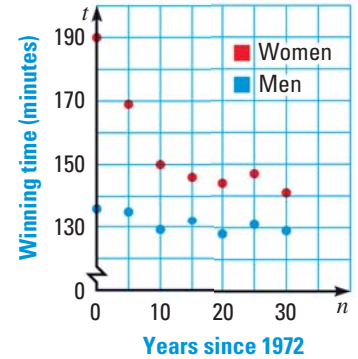 ★ **TAKS REASONING** A field biologist collected and measured alligator snapping turtle eggs. The graph shows the mass m (in grams) of an egg as a function of its length ℓ (in millimeters).

   a. Describe As the lengths of the eggs increase, what happens to the masses of the eggs?

   b. Estimate Is 27.5 g a reasonable estimate for the mass of an egg that is 38 mm long? *Explain*.

20. ★ **TAKS REASONING** Women first officially ran in the Boston Marathon in 1972. The graph shows the winning time t (in minutes) for both men and women as a function of the number n of years since 1972 for that year and every five years thereafter.

   a. CHALLENGE *Explain* how you can estimate the difference in the men's and women's winning time for any year shown.

   b. CHALLENGE *Compare* any trends you see in the graphs.

MIXED REVIEW FOR TAKS

21. ★ **TAKS PRACTICE** A cylindrical can has a diameter of 2 inches and a height of 8 inches. What is the volume of the can? *TAKS Obj. 8*

   A 8π in.^{3} **B** 16π in.^{3} **C** 32π in.^{3} **D** 64π in.^{3}

22. ★ **TAKS PRACTICE** Granite weighs about 1.5 ounces per cubic inch. Which expression gives the weight in ounces of a solid cube of granite that has an edge length of 10 inches? *TAKS Obj. 1*

   F 15^3 **G** $1.5^3 \cdot 10^3$ **H** 150 **J** $1.5 \cdot 10^3$

QUIZ *for Lessons 1.6–1.7*

1. The domain of the function $y = 12 - 2x$ is 0, 2, 3, 4, and 5. Make a table for the function, then identify the range of the function. *(p. 35)*

Tell whether the pairing is a function. *(p. 35)*

2.

x	5	6	7	11
y	1	2	3	7

3.

x	4	6	9	15
y	1	3	6	3

Graph the function. *(p. 43)*

4. $y = 2x - 5$; domain: 5, 6, 7, 8, and 9   **5.** $y = 7 - x$; domain: 1, 2, 3, 4, and 5