## Stewart - Calculus 8e Chapter 1 Form C

Select the correct answer for each question.

a. 
$$f(x) = \frac{4x^2}{x^4 + 1}$$

b. 
$$f(x) = 8x^3 + 10x^2 + 1$$

c. 
$$f(x) = x^3 - 9x$$

$$f(x) = \frac{7x + 1}{x^2}$$

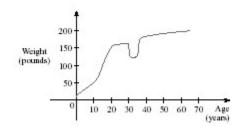
a. 
$$(-\infty, 0)$$

b. 
$$\left(-\infty, -\frac{1}{7}\right) \cup \left(-\frac{1}{7}, \infty\right)$$

c. 
$$\left(-\infty, \frac{1}{7}\right) \cup \left(\frac{1}{7}, \infty\right)$$

d. 
$$(-\infty, 0) \cup (0, \infty)$$

3. The graph shown gives the weight of a certain person as a function of age. Find the age at which the person started an exercise program.



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4. The relationship between the Fahrenheit and Celsius temperature scales is given by the linear function.

$$F = \frac{9}{5}C + 32$$

What is the *F*-intercept and what does it represent?

- a.  $\frac{9}{5}$ , Fahrenheit temperature corresponding to  $0 \,^{\circ} C$
- b.  $\frac{9}{5}$ , Celsius temperature corresponding to 32° C
- c. 32, Celsius temperature corresponding to  $0 \,{}^{\circ} F$
- d. 0, Fahrenheit temperature corresponding to  $32^{\circ}C$
- e. 32, Fahrenheit temperature corresponding to 0°C
- \_\_\_ 5. Use the table to evaluate the expression  $(f \circ g)(6)$ .

х	1	2	3	4	5	6
f(x)	3	2	1	0	1	2
g(x)	6	5	2	3	4	6

- a. 5
- b. 2
- c 3
- d. 4
- e. 6