1

If $x > 3$, which of the following is equivalent to $\dfrac{1}{\dfrac{1}{x+2}+\dfrac{1}{x+3}}$?

A) $\dfrac{2x+5}{x^2+5x+6}$

B) $\dfrac{x^2+5x+6}{2x+5}$

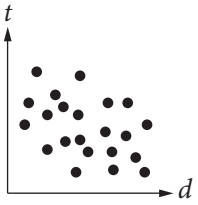
C) $2x+5$

D) x^2+5x+6

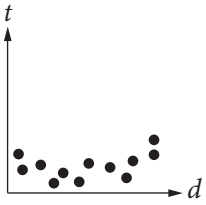
2

Which of the following graphs best shows a strong negative association between d and t ?

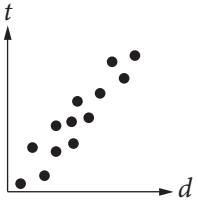
A)



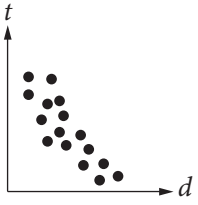
B)



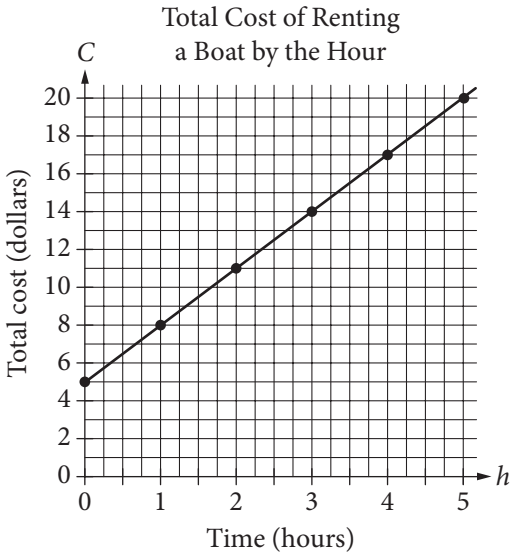
C)



D)



Questions 1 and 2 refer to the following information.



The graph above displays the total cost C, in dollars, of renting a boat for h hours.

3

What does the C-intercept represent in the graph?

A) The initial cost of renting the boat

B) The total number of boats rented

C) The total number of hours the boat is rented

D) The increase in cost to rent the boat for each additional hour

4

Which of the following represents the relationship between h and C ?

A) $C = 5h$

B) $C = \frac{3}{4}h + 5$

C) $C = 3h + 5$

D) $h = 3C$

5

$$h(x) = \frac{1}{(x-5)^2 + 4(x-5) + 4}$$

For what value of x is the function h above undefined?

6

An online bookstore sells novels and magazines. Each novel sells for \$4, and each magazine sells for \$1. If Sadie purchased a total of 11 novels and magazines that have a combined selling price of \$20, how many novels did she purchase?

A) 2

B) 3

C) 4

D) 5