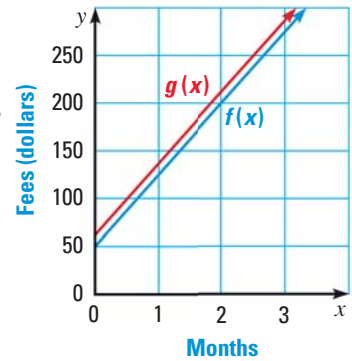


35. **SOFTBALL** A softball training academy charges students a monthly fee plus an initial registration fee. The total amounts paid by two students are given by the functions $f(x)$ and $g(x)$ where x is the numbers of months the students have been members of the academy. The graphs of f and g are parallel lines. Did the students pay different monthly fees or different registration fees? How do you know?



36. **TAKS REASONING** If you are one of the first 100 people to join a new health club, you are charged a joining fee of \$49. Otherwise, you are charged a joining fee of \$149. The monthly membership cost is \$38.75.
- Write an equation that gives the total cost (in dollars) of membership as a function of the number of months of membership if you are one of the first 100 members to join.
 - Write an equation that gives the total cost (in dollars) of membership as a function of the number of months of membership if you are *not* one of the first 100 members to join.
 - How are the graphs of these functions related? How do you know?
 - After 6 months, what is the difference in total cost for a person who paid \$149 to join and a person who paid \$49 to join? after 12 months?
37. **CHALLENGE** You and your friend have gift cards to a shopping mall. Your card has a value of \$50, and your friend's card has a value of \$30. If neither of you uses the cards, the value begins to decrease at a rate of \$2.50 per month after 6 months.
- Write two equations, one that gives the value of your card and another that gives the value of your friend's card as functions of the number of months after 6 months of nonuse.
 - How are the graphs of these functions related? How do you know?
 - What are the x -intercepts of the graphs of the functions, and what do they mean in this situation?



MIXED REVIEW FOR TAKS

TAKS PRACTICE at classzone.com

REVIEW

Skills Review
Handbook p. 936;
TAKS Workbook

38. **TAKS PRACTICE** You plan to travel on a train to visit your cousins. A train leaves 10 minutes past every hour and takes 1 hour and 20 minutes to reach your cousins' town. It is 9:45 A.M. now, and it will take you 25 minutes to pack and 30 minutes to get to the train station. What time will you reach your cousins' town? **TAKS Obj. 10**
- (A) 11:30 A.M. (B) 12 P.M. (C) 12:20 P.M. (D) 12:30 P.M.
39. **TAKS PRACTICE** If $(x, 9)$ is a solution to the equation $3x - 4y = 9$, what is the value of x ? **TAKS Obj. 4**
- (F) -15 (G) -9 (H) 15 (J) 45

REVIEW

Lesson 5.4;
TAKS Workbook