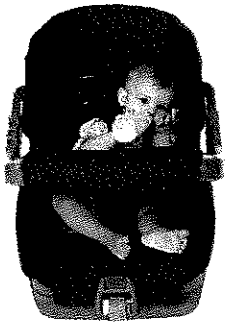


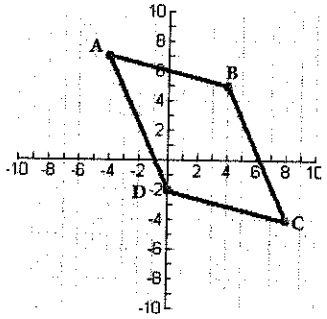
21. At 2 weeks old, Bob's baby sister weighed 9 pounds. When she was 8 weeks old, she weighed 12 pounds. Let x represent how old the baby is in weeks and y represent the baby's weight in pounds.

a. Write two ordered pairs that use the data about Bob's sister.

b. Find the equation of the line that goes through these two points.

c. If Bob's sister continues to grow at this rate, how much will she weigh when she is 20 weeks old? Is this reasonable? Why or why not?

22. Four line segments make the four sides of a quadrilateral on the coordinate plane below. Find the equations of the lines containing each side: $\overline{AB}$, $\overline{BC}$, $\overline{CD}$, $\overline{AD}$. Are there any similarities in the equations for lines $\overline{AB}$ and $\overline{CD}$? How about $\overline{BC}$ and $\overline{AD}$?



23. A raft rental company on the Gauley River rents rafts for a set fee plus an additional charge per hour. Francis asked two different people how many hours they had rented their rafts for and how much it cost. One rented a raft for 6 hours and paid \$32. Another rented a raft for 11 hours and paid \$47. Let x represent the length of time in hours a raft is rented for and let y represent the total cost.

a. What is the linear equation that represents the data Francis collected?

b. What number in the linear equation represents the amount of the set fee?

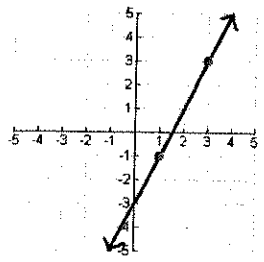
c. What is the real-world meaning of the slope in this equation?

d. How much will someone pay for a raft rental from this company if he only keeps the raft for 4 hours? Show all work necessary to justify your answer.

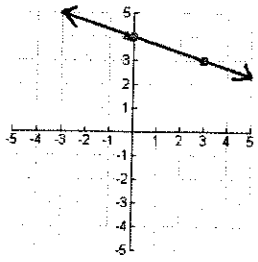
REVIEW

Write the linear equation for each graph in slope-intercept form.

24.



25.



26.