

## Homework

## Activity 1

Use algebra to solve the functions.

- $y = 0.10x + 20$  for  $y = 360$
- $y = 0.20x + 10$  for  $y = 210$
- $y = 0.50x + 40$  for  $y = 140$
- $y = 0.30x + 30$  for  $y = 930$

## Activity 2

Write an equation for each function using the car rental contracts.

**Model** A rental car costs \$50 plus 20 cents per mile. Write the equation that describes this function.

Answer:  $y = 0.20x + 50$

- A rental car costs \$25 plus 10 cents per mile. Write the equation.
- A rental car costs \$100 plus 5 cents per mile. Write the equation.
- A rental car costs \$20 plus 30 cents per mile. Write the equation.
- A rental car company only charges per mile. The rate is \$1 per mile. Write the equation.

## Activity 3

For each of the everyday functions, write the equation that describes the function. Use  $y = mx + b$  form.

- Todd is a busboy at a popular restaurant. He gets paid \$8 per hour and \$50 per night he works. Write an equation that describes this function.
- Loretta has a babysitting business and she charges \$10 per hour and a flat fee of \$5 per job. Write an equation that shows this function.
- The tickets for the baseball game cost \$30 per ticket plus a \$10 processing fee for each group purchasing tickets. Write an equation that shows this function.

## Activity 4 • Distributed Practice

Solve.

- $-24 + -18 + -14$
- $27 - 4 - 8$
- $-18 \div 9$
- $-9 \cdot -8$
- $-170 - -90$
- $417 - 503$