

# Write a Function Rule

Name: \_\_\_\_\_

Write a function rule that represents each situation.

1.  $y$  is less than the product of 4 and  $x$ .
2. 7 less than three fifths of  $b$  is  $a$ .
3. A worker's earnings  $e$  are a function of the number of hours  $n$  worked at a rate of \$8.75 per hour.
4. The price  $p$  of a pizza is \$6.95 plus \$0.95 for each topping  $t$  on the pizza.
5. The almond extract  $a$  remaining in an 8-oz bottle decreases by  $\frac{1}{6}$  oz for each batch  $b$  of cookies made.
6. A helicopter hovers 40 ft above the ground. Then the helicopter climbs at a rate of 21 feet per second. Write a rule that represents the helicopter's height  $h$  above the ground as a function of time  $t$ . What is the helicopter's height after 45 seconds?
7. A new book is being planned. It will have 24 pages of introduction. Then it will have  $c$  12-page chapters and 48 more pages at the end. Write a rule that represents the number of pages  $p$  in the book as a function of the number of chapters. Suppose the book has 25 chapters. How many pages will it have?
8. Write a function rule for the area of a triangle with a base 3 cm greater than 5 times its height. What is the area of the triangle when its height is 6 cm?
9. Write a function rule for the area of a rectangles with a length 2ft less than three times its width. What is the area of the rectangle when its width is 2 ft?