

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

1. Write the following as mathematical expressions.

(a) The sum of  $m$  and  $n$

(b) The product of  $A$  and  $B$

(c) 8 more than  $x$

(d) 5 less than  $P$

(e) The square of the sum of  $y$  and  $z$

(f) The difference between the square of  $a$  and the square root of  $b$

2. Write the following statements as mathematical equations.

(a) The sum of  $x$  and  $y$  is 4

(b)  $M$  is equal to the product of  $P$  and  $Q$

(c)  $f$  is equal to 7 less than  $g$

(d)  $y$  is equal to the square root of the sum of  $a$  and  $t$

(e)  $T$  is equal to 9 more than the product of  $V$  and  $W$

(f) Force ( $F$ ) is equal to the product of pressure ( $P$ ) and area ( $A$ ).

(g) Energy ( $E$ ) is equal to intensity ( $I$ ) divided by the square of distance ( $d$ ).

3.  $t$  = price of a **ticket** into a fun park  
 $r$  = price of a **ride** in the fun park  
Write the following statement using these symbols.

The price of 6 tickets and 8 rides is \$100.

4. The cost for a handyman was \$30 call-out fee plus \$20 per hour.

(a) Write a formula that could be used to find the total cost ( $C$ ) for calling out the handyman for  $t$  hours.

(b) How much would it cost for the handyman to do a job that took 3 hours?

(c) The bill from the handyman for another job was \$150. How long did the job take?

5. Complete the table below for the following formula.

$$y = 2x - 5$$

$x$	1	2	3	6	9	12	20
$y$							

6. Complete the table below for the following formula.

$$a = 3b + 4$$

$b$	1	2	7	12			
$a$					13	28	64