

## Why Did the Greenhouse Call a Doctor?

Answer each question, then find your answer and cross out the letters above it.  
When you finish, write the remaining letters in the spaces at the bottom of the page.

In Exercises 1-3, find the domain and range of the relation.

**1.**

Age (years)	Height (inches)
4	41
8	49
12	58
16	67

**2.**

x	y
-2	7
-1	4
0	2
1	4
2	7

**3.**

x	y
-3	4
8	-9
0	-6
-3	7
-5	12

domain: \_\_\_\_\_ domain: \_\_\_\_\_ domain: \_\_\_\_\_  
range: \_\_\_\_\_ range: \_\_\_\_\_ range: \_\_\_\_\_

In Exercises 4-7, find the indicated values for the function.

**4.**  $f(x) = 4x - 7$

a.  $f(3)$

b.  $f(-5)$

**5.**  $f(x) = -3x + 10$

a.  $f(4)$

b.  $f(-9)$

**6.**  $g(x) = x^2 + 5x - 1$

a.  $g(6)$

b.  $g(-4)$

**7.**  $h(x) = -2x^2 - 3x + 8$

a.  $h(5)$

b.  $h(0)$

In Exercises 8-13, find the range of the function for the given domain.

**8.**  $f(x) = 2x + 7$     {5, 18, -5}

**9.**  $g(x) = 9 - 4x$     {-2, 10, -1}

**10.**  $F(x) = 3x^2 - 1$     {2, 4, -3}

**11.**  $h(x) = x^2 + 8x - 3$     {1, 5, -2}

**12.**  $f(t) = \frac{t^2 + 2t}{t - 5}$     {4, 7, -2}

**13.**  $G(n) = -n^2 + 3n + 2$     {5, -3, 0}

<b>TH</b> {-2, -1, 0, 1, 2}	<b>HE</b> 8	<b>IT</b> {11, 62, 0}	<b>AT</b> -5	<b>IS</b> {17, 43, -3}	<b>HA</b> -6	<b>RD</b> {-3, 8, 0, -5}
<b>SO</b> {4, -9, -6, 7, 12}	<b>DW</b> 19	<b>HE</b> {-8, -16, 2}	<b>ME</b> 5	<b>LP</b> {11, 47, 26}	<b>TH</b> -2	<b>IN</b> {4, -9, -6, 0, -5}
<b>TO</b> {4, 8, 12, 16}	<b>DO</b> -18	<b>SA</b> {7, 4, 2}	<b>VE</b> -57	<b>WP</b> {6, 47, 2}	<b>UN</b> 65	<b>IT</b> {-24, 31.5, 0}
<b>AI</b> {-3, 8, 7, 12}	<b>RS</b> -27	<b>SI</b> {17, -31, 13}	<b>DE</b> 37	<b>CK</b> {6, 62, -15}	<b>NS</b> 74	<b>UP</b> {41, 49, 58, 67}