

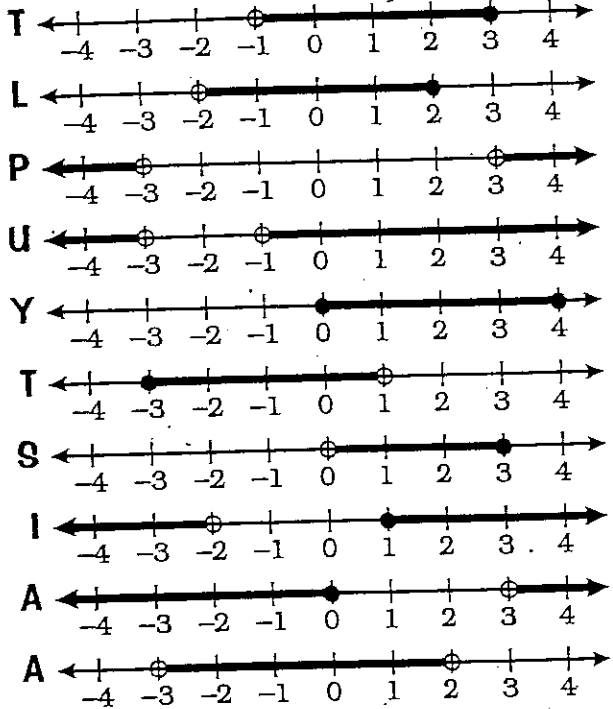
# What Do You Call a Female Bug That Floats?



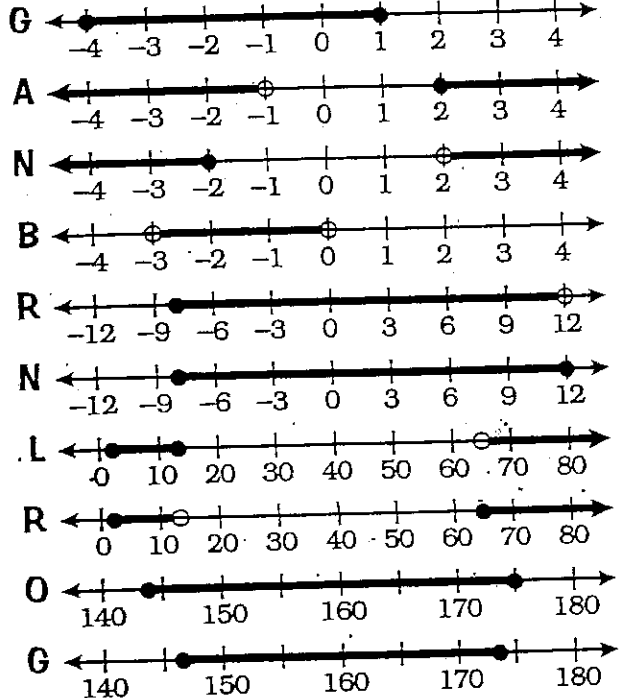
Graph the solution for each exercise. Find your answer in the answer column, then write the letter of the solution in the box containing the exercise number.

- 1  $2x \geq -6$  and  $x - 1 < 0$  T
- 2  $-7x < 14$  and  $3x + 2 \leq 8$  L
- 3  $-8 < x - 5 < -3$  A
- 4  $1 \leq 4x + 1 \leq 17$  Y
- 5  $1 \leq -2x + 7 < 9$  T
- 6  $3x - 1 < -7$  or  $4x + 9 \geq 13$  I
- 7  $-5x > 15$  or  $x - 5 > -6$  U
- 8  $4 - 15x \geq 4$  or  $12x > 36$  A
- 9  $-3x + 10 \geq 16$  or  $9 - x < 7$  N
- 10  $\frac{x}{2} \geq -2$  and  $5 - 2x \geq 3$  G
- 11  $8 < 8 - \frac{1}{3}x < 9$  B
- 12  $-6x - 1 > 5$  or  $11 + 4x \geq 19$  A
- 13 Today in Anchorage, the expected low temperature is  $-8^{\circ}\text{F}$ , and the expected high temperature is  $12^{\circ}\text{F}$ . Express this range as a compound inequality. N
- 14 Flix Theater has a reduced ticket price for children who are at least 2 years old but less than 13 years old. The same price is given to seniors who are at least 65 years old. Model these ranges on a number line. R
- 15 Your heart rate rises when you exercise. During aerobic exercise, your heart rate should be at least  $0.7(220 - a)$ , but no more than  $0.85(220 - a)$ , where  $a$  is your age. Find the target range if you are 14 years old. O

### Answers for Exercises 1-8



### Answers for Exercises 9-15



3	11	7	15	4	8	13	1	10	6	14	2	12	9	5
A	B	U	O	Y	A	N	T	G	I	R	L	A	N	T

Inequalities:  
Solving Compound Inequalities