

What Do Biologists Do When They Visit France?

Equations and Problems:
Solving a Formula for a Given Variable

Solve each formula for the indicated variable. Circle the letter next to your answer.
Write this letter in the box at the bottom of the page containing the exercise number.

$d = rt$, for r <input type="radio"/> E $r = \frac{d}{t}$ <input type="radio"/> M $r = \frac{t}{d}$ 1	$B = T - Lc$, for T <input type="radio"/> V $T = \frac{B}{Lc}$ <input type="radio"/> O $T = B + Lc$ 2	$S = 2\pi rh$, for h <input type="radio"/> L $h = \frac{2\pi S}{r}$ <input type="radio"/> I $h = \frac{S}{2\pi r}$ 3	$E = mc^2$, for m <input type="radio"/> A $m = \frac{E}{c^2}$ <input type="radio"/> W $m = \frac{c^2}{E}$ 4	$A = \frac{bh}{2}$, for b <input type="radio"/> S $b = \frac{Ah}{2}$ <input type="radio"/> T $b = \frac{2A}{h}$ 5
$y = mx + b$, for b <input type="radio"/> T $b = \frac{mx}{y}$ <input type="radio"/> N $b = y - mx$ 6	$y = mx + b$, for x <input type="radio"/> G $x = b - my$ <input type="radio"/> I $x = \frac{y - b}{m}$ 7	$I = \frac{E}{R}$, for E <input type="radio"/> E $E = IR$ <input type="radio"/> I $E = \frac{I}{R}$ 8	$V = \pi r^2 h$, for h <input type="radio"/> T $h = \frac{\pi V}{r^2}$ <input type="radio"/> G $h = \frac{V}{\pi r^2}$ 9	$T = p + prt$, for r <input type="radio"/> A $r = \frac{T - p}{pt}$ <input type="radio"/> K $r = \frac{T - pt}{t}$ 10
$A = \frac{\pi r^2 S}{360}$, for S <input type="radio"/> E $S = \frac{360A}{\pi r^2}$ <input type="radio"/> F $S = \frac{360}{\pi r^2 A}$ 11	$p = 2l + 2w$, for w <input type="radio"/> N $w = \frac{p + l}{2}$ <input type="radio"/> Y $w = \frac{p - 2l}{2}$ 12	$V = \frac{1}{3} Bh$, for h <input type="radio"/> P $h = 3VB$ <input type="radio"/> S $h = \frac{3V}{B}$ 13	$P = a + (n - 1)b$, for b <input type="radio"/> H $b = \frac{P - a}{n - 1}$ <input type="radio"/> R $b = \frac{(n - 1)a}{P}$ 14	$h = vt - 16t^2$, for v <input type="radio"/> S $v = \frac{h + 16t^2}{t}$ <input type="radio"/> B $v = \frac{16t^2 - h}{t}$ 15
$m = \frac{2E}{v^2}$, for E <input type="radio"/> L $E = 2mv^2$ <input type="radio"/> G $E = \frac{mv^2}{2}$ 16	$A = \frac{a + b + c}{3}$, for c <input type="radio"/> N $c = \frac{3A}{a + b}$ <input type="radio"/> T $c = 3A - a - b$ 17	$S = \frac{1}{2} at^2$, for t^2 <input type="radio"/> P $t^2 = \frac{2S}{a}$ <input type="radio"/> F $t^2 = \frac{2a}{S}$ 18	$F = \frac{9}{5} C + 32$, for C <input type="radio"/> T $C = \frac{5}{9} F + 32$ <input type="radio"/> E $C = \frac{5}{9} (F - 32)$ 19	$V = \frac{4}{3} \pi r^3$, for r^3 <input type="radio"/> R $r^3 = \frac{3V}{4\pi}$ <input type="radio"/> D $r^3 = \frac{4V\pi}{3}$ 20

5	14	8	12	16	2	18	10	20	4	13	7	17	1	15	11	19	3	6	9
---	----	---	----	----	---	----	----	----	---	----	---	----	---	----	----	----	---	---	---

Where Do Airline Pilots Keep Their Uniforms?

✈ For each exercise, write the letter of the answer in the box containing the exercise number.

In Exercises 1-6, match the inequality with its graph.

1 $x < 1$

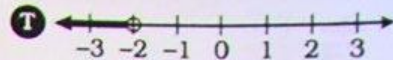
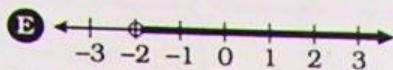
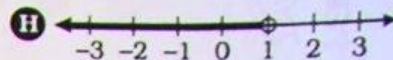
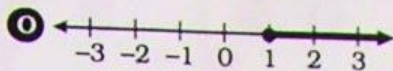
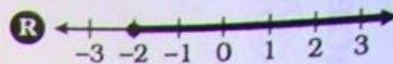
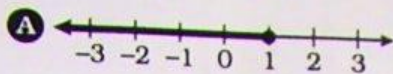
2 $x \leq 1$

3 $x > -2$

4 $x \geq -2$

5 $-2 > x$

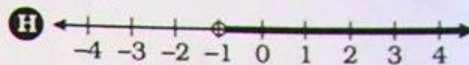
6 $1 \leq x$



In Exercises 7-18, solve the inequality. Then graph the solution.

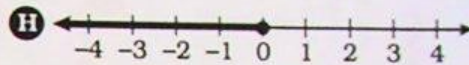
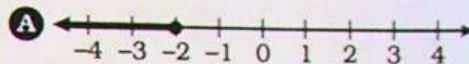
7 $4n + 1 < 9$

8 $7a - 2 \geq 5$



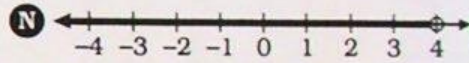
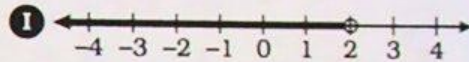
9 $3y + 10 \leq 4$

10 $8k - 3 > -27$



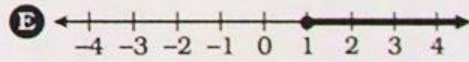
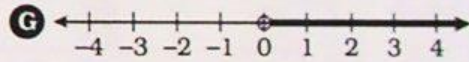
11 $\frac{x}{2} + 9 < 11$

12 $\frac{d}{6} - 4 \geq -5$



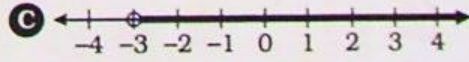
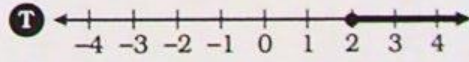
13 $\frac{u}{15} - 2 \leq -2$

14 $5p - 14 < 26$



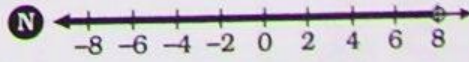
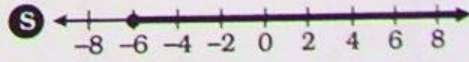
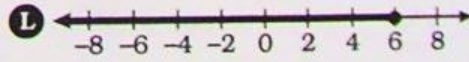
15 $18 \leq 7b + 4$

16 $-9 < 12y + 3$



17 $-14 \geq \frac{x}{3} - 16$

18 $5 < \frac{m}{8} + 5$



7	11	5	13	3	10	17	6	15	1	8	12	16	2	14	18	9	4
---	----	---	----	---	----	----	---	----	---	---	----	----	---	----	----	---	---