



Solving two-step equations

Solve the equations below by identifying the variable value. Verify the variable value by either substituting it back into the original equation or looking for it on the puzzle sheet. You are not required to solve the puzzle.



## Why Did the Chicken Cross the Road?

TO GET TO THE OTHER SIDE, of course. But do you know the answers to THESE two questions?

1. What do you call a chicken crossing the road?

9 lb 10 h -11 -80 8 h -65 12 37 lb 4 -36 7 lb 18 10 h 8 h 4 10 h -36

2. Why did the turkey cross the road?

8 h 10 h 39 9 lb -65 10 h -7 6 -33 -45 6 11 h 32 -96 -30 -36 8 h 15 41 lb -45 4 41 lb 20 6 -36

Solve the equation or problem. Find your solution in the code. Each time it appears, write the exercise letter above it.

E.  $5 + 4n = 29$

U.  $-8 - 3y = 25$

S.  $19 + \frac{x}{2} = 4$

R.  $-\frac{1}{5}d - 1 = 12$

M.  $90 = 10p - 90$

Y.  $-11 = 61 - 6q$

H.  $-17 - \frac{u}{3} = -2$

A.  $-8 = 4 + \frac{1}{8}b$

I.  $-64 = -15m - 4$

V.  $12 - 9w = 75$

L.  $-13 - \frac{1}{4}h = 7$

W.  $\frac{a}{-16} + 101 = 99$

**K.** Jo is thinking of a number. Four less than 9 times the number is 176. Find Jo's number.

**N.** Mo is thinking of a number. Eleven more than one third of the number is  $-1$ . Find Mo's number.

**P.** A table and 8 chairs together weigh 97 lb. If the table weighs 25 lb, how much does each chair weigh?

**C.** Three desks and a bookcase together weigh 157 lb. The bookcase weighs 34 lb. How much does each desk weigh?

**T.** Mr. Piper's plumbing needed repairs. The plumber charged \$98 for parts plus \$45 per hour for labor. If the bill totaled \$458, how many hours of labor were required?

**O.** Oshgosh would like to buy a new pair of skates for \$115. So far he has saved \$40. If he earns \$7.50 per hour, how many hours must he work until he can buy the skates?