

One + Two - Step Equations.

#5 Solve and verify each equation.

a) $2s = 6$

b) $\frac{b}{3} = 5$

c) $5e = -35$

d) $\frac{x}{2} = -7$

e) $-9w = 2.7$

f) $\frac{c}{5} = -1.2$

#6 Solve and verify each equation.

a) $3x + 2 = 8$

b) $-5a - 6 = 7$

c) $\frac{m}{2} - 6 = 1$

d) $\frac{r}{8} + 5.5 = 2$

Novice: #5abcd, #6abc, #9a, #10ad, #11a

Apprentice: #5cdef, #b, #9, #10abcdef

Expert: #8, #10, #11, #13

8. Solve each equation.

~~Which strategy did you use?~~

Verify the solution.

a) $4x = 9.6$

b) $10 = 3b - 12.5$

c) $-5.25x = -210$

d) $-0.5 = -2x + 8.1$

e) $250 + 3.5n = 670$

f) $-22.5 = -2c - 30.5$

9. For each statement below, write then solve an equation to determine the number.

Verify the solution.

a) Two times a number is -10 .

b) Three times a number, plus 6.4 , is 13.9 .

c) Four times a number is -8.8 .

d) Ten is equal to two times a number, plus 3.6 .

10. Solve each equation. Verify the solution.

a) $\frac{c}{3} = 15$

b) $\frac{m}{6} - 1.5 = -7$

c) $-1.5 = \frac{n}{4}$

d) $5 = \frac{q}{-2} - 5$

e) $\frac{2c}{5} = 1.2$

f) $1.2 = \frac{2a}{3} + 5.1$

11. For each statement below, write then solve an equation to determine the number.

Verify the solution.

a) A number divided by 4 is -7 .

~~b) Three, plus a number divided by 5 is 6 .~~

c) One-half of a number is 2.5 .

d) One-third of a number, minus 4 , is 2 .

13. Erica is thinking of a number.

If you divide her number by 3 then subtract 13.5 , the result is 2.8 .

a) Let b represent Erica's number.

Write an equation to determine this number.

b) Solve the equation.

c) Verify the solution.

Answer Key.

#5

- a) $s = 3$
- b) $b = 15$
- c) $e = -7$
- d) $x = -14$
- e) $w = -0.3$
- f) $c = -6$

Check your
answers
as you
go!

#6

- a) $x = 2$
- b) $a = -2.6$
- c) $m = 14$
- d) $r = -28$

8. a) $x = 2.4$ b) $b = 7.5$
c) $x = 40$ d) $x = 4.3$
e) $n = 120$ f) $c = -4$
9. a) $2x = -10; x = -5$
b) $3x + 6.4 = 13.9; x = 2.5$
c) $4x = -8.8; x = -2.2$ d) $2x + 3.6 = 10; x = 3.2$
10. a) $c = 45$ b) $m = -33$
c) $n = -6$ d) $q = -20$
e) $c = 3$ f) $a = -5.85$
11. a) $\frac{x}{4} = -7; x = -28$ b) $3 + \frac{x}{5} = 6; x = 15$
c) $\frac{x}{2} = 2.5; x = 5$ d) $\frac{x}{3} - 4 = 2; x = 18$
12. No, Jenna's partner should undo the operations in the reverse order: subtract 4 then divide by -2 .
13. a) $\frac{b}{3} - 13.5 = 2.8$ b) $b = 48.9$