Equations

Review Examples - “Algebraic Calculations”

1.) $s = 1s = s/1$

2.) $d + d + d + d = 4d$

3.) $f/3 = 11$

$f = 3 \times 11$

$f = 33$ *Verify*: $11/3 = 3$

4.) $72/g = 8$

$g = 72/8$

$g = 9$ *Verify*: $72/9 = 8$

7.) $q + q + q = 21$

$3q = 21$

$3q/3 = 21/3$

$q = 7$ *Verify*: $7 + 7 + 7 = 21$

8.) $9k = 54$

$9k/9 = 54/9$

$k = 6$ *Verify*: $9 \times 6 = 54$

9.) $3p + 5 = 17$

$3p + 5 - 5 = 17 - 5$

$3p = 12$

$3p/3 = 12/3$

$p = 4$ *Verify*: $3 \times 4 + 5 = 17$ * *follow the order of operations*

10.) $45 + 8t = 77$

$45 - 45 + 8t = 77 - 45$

$8t = 32$

$8t/8 = 32/8$

$t = 4$ *Verify*: $45 + 8 \times 4 = 77$ * *follow the order of operations*

11.) $5m - 6 = 14$

$5m - 6 + 6 = 14 + 6$

$5m = 20$

$5m/5 = 20/5$

$m = 4$ *Verify*: $5 \times 4 - 6 = 14$ * *follow the order of operations*

12.) $10 - 6e = -2$

$10 - 10 - 6e = -2 - 10$

$-6e = -12$

$-6e/- 6 = -12/-6$

$e = 2$ *Verify*: $10 - 6 \times 2 = -2$ * *follow the order of operations*

13.) $-8 = s + 6$

$-8 - 6 = s + 6 - 6$

$-14 = s$ Verify: $-8 = -14 + 6$

<u>Important Note</u>:

- Students may use a number of problem solving strategies to evaluate an equation:

  1.) Algebra Tile

  2.) Inspection

  3.) Systematic Trial

  4.) Balance-Scale model

  5.) Algebra