Inverses: opposites + ⇄ − * ⇄ ÷ * cancel terms → 0

Kuta Software - Infinite Pre-Algebra

Name_____

One-Step Equations With Integers

Date_____ Period____

Solve each equation. SADMEP

1) $v - 10 = -9$
+10 +10
$v = 1$

variable totally by itself

2) $v - 10 = -3$
+10 +10
$v = 7$

3) $x - 3 = 4$
+3 +3
$x = 7$

4) $\frac{x}{5} = 2$ Reciprocal.
$\frac{5}{1} \cdot \frac{1}{5} \cdot x = 2 \cdot \frac{5}{1}$
$\frac{5}{5} x = 10$
$x = 10$

5) $22 = -11k$
$\frac{22}{-11} = \frac{-11k}{-11}$
$-2 = k$
$k = -2$

+ * − = −
− * − = +
$\frac{+}{-} = -$
$\frac{-}{-} = +$

6) $-13m = -377$
$\frac{-13m}{-13} = \frac{-377}{-13}$
$m = \frac{337}{13}$

13 | 337 → 2, 26, 77

7) $b - 7 = -1$
+7 +7
$b = 6$

8) $-8 = p - 13$
+13 +13
$5 = p$

9) $-40 = -5p$
$\frac{-40}{-5} = \frac{-5p}{-5}$
$8 = p$

10) $418 = -22a$
$\frac{418}{-22} = \frac{-22a}{-22}$
$-19 = a$

11) $\frac{a}{29} = 5$ · 29
$a = 145$

12) $-2 = \frac{m}{16}$ · 16
$-32 = m$

13) $x - 11 = 16$
+11 +11
$x = 27$

14) $-10 = x - 21$
+21 +21
$11 = x$

15) $20 = \frac{n}{4} \cdot 4$

$80 = n$

16) $n - 29 = -53$

$+29 \quad +29$

$n = -24$

17) $-19 = b - 6$

$+6 \quad +6$

$-13 = b$

18) $-8 = -16 + n$

$+16 \quad +16$

$8 = n$

19) $-9 + x = -26$

$+9 \quad +9$

$x = -17$

20) $29 + n = 13$

$-29 \quad -29$

$n = -16$

21) $21 = \frac{x}{18} \cdot 18$

$378 = x$

22) $k + 1 = -27$

$-1 \quad -1$

$k = -28$

23) $6 = m - 16$

$+16 \quad +16$

$22 = m$

24) $5 = v + 29$

$-29 \quad -29$

$-24 = v$

25) $168 = -84n$

$\frac{-84}{} \quad \frac{-84}{}$

$-2 = x$

26) $41k = -2747$

$k = -67$

27) $\frac{x}{15} = 11 \cdot 15$

$x = 165$

28) $-71 = \frac{x}{64} \cdot 64$

$-4544 = x$