

Key

What Do You Call Someone Who Can't Turn Pancakes?

Cross out the letter pair next to each correct solution.

For each letter pair you DON'T cross out, write the upper case letter in the box containing the lower case letter.

a	b	c	d	e	f	g	h	i	j	k	l	m	
A			F	L	I	P				F	L	O	P

1 $9y + 4 = 2y + 25$

$y = 3$

2 $5n - 2 = n + 18$

$n = 5$

3 $11 + 8q = 3q - 19$

$q = -6$

4 $-3 - 10x = 25 + 4x$

$x = -2$

5 $15a = 6a - 90$

$a = -10$

6 $24 - 5d = d$

$d = 4$

7 Xavier is thinking of a number. Nine more than four times the number is the same as fifteen less than twice the number. What is Xavier's number? $n = -12$

8 $2 + 11b = 8b + 15$

$b = \frac{13}{3}$ or $4\frac{1}{3}$

9 $7m + 32 = 12 - m$

$m = -\frac{5}{2}$ or $-2\frac{1}{2}$

10 $16 - 5y = 1 - 4y$

$y = 15$

11 $2x - 8x + 1 = 9 - 10x$

$x = 2$

12 $-3t - 8 + 7t = 34 + 9t - 2$ 13 $2a + 3a + 4a = 5a - 18$

$t = -8$

$a = -\frac{9}{2}$ or $-4\frac{1}{2}$

14 Yvonne is thinking of a number. Fifty, decreased by three times the number, is the same as seven times the number, increased by 80. What is Yvonne's number? $n = -3$

15 $5(x + 4) = 7x - 26$

$x = 23$

16 $20 - 9w = 4(15 - w)$

$w = -8$

17 $2(11 + 3n) = 12n$

$n = \frac{11}{3}$ or $3\frac{2}{3}$

18 $10 - 4(p + 7) = 2(1 - p)$

$p = -10$

19 $11x = 8x - 3(5 - 2x)$

$x = 5$

20 $9 - 6(4u - 1) = u + 15$

$u = 0$

21 Zabato is thinking of a number. Three times the sum of the number and ten is the same as eight times the number. What is Zabato's number? $n = 6$

e • N	4
a • P	-6
f • I	-1
d • R	-12
1 • F	3
b • A	7
i • E	-10
g • S	5
j • L	-9
k • U	-2

e • N	15
k • O	-6
c • H	$-\frac{1}{2}$
m • T	-3
g • P	$-3\frac{3}{4}$
a • R	8
1 • S	$4\frac{1}{3}$
h • D	2
d • F	11
i • L	$-4\frac{1}{2}$

e • T	-8
1 • V	6
h • S	-10
1 • P	18
m • E	$3\frac{2}{3}$
e • L	-9
c • N	0
i • G	23
a • P	5
i • F	$6\frac{1}{3}$

WS 3.15

"What do you call someone who can't turn pancakes?"

$$\begin{aligned} 1) \quad 9y + 4 &= 2y + 25 \\ + -2y &\quad + -2y \\ 7y + 4 &= 25 \\ + -4 &\quad + -4 \\ (\frac{1}{7})7y &= 21(\frac{1}{7}) \\ \boxed{y = 3} \end{aligned}$$

$$\begin{aligned} 2) \quad 5n + -2 &= n + 18 \\ + -n &\quad + -n \\ 4n + -2 &= 18 \\ + 2 &\quad + 2 \\ (\frac{1}{4})4n &= 20(\frac{1}{4}) \\ \boxed{n = 5} \end{aligned}$$

$$\begin{aligned} 3) \quad 11 + 8q &= 3q + -19 \\ + -3q &\quad + -3q \\ + -11 &\quad + -11 \\ (\frac{1}{5})5q &= -30(\frac{1}{5}) \\ \boxed{q = -6} \end{aligned}$$

$$\begin{aligned} 4) \quad -3 + -10x &= 25 + 4x \\ + -4x &\quad + -4x \\ -3 + -14x &= 25 \\ + 3 &\quad + 3 \\ (-\frac{1}{14})-14x &= 28(-\frac{1}{14}) \\ \boxed{x = -2} \end{aligned}$$

$$\begin{aligned} 7) \quad 4n + 9 &= 2n - 15 \\ + -2n &\quad + -2n \\ 2n + 9 &= -15 \\ + -9 &\quad + -9 \\ (\frac{1}{2})2n &= -24(\frac{1}{2}) \\ \boxed{n = -12} \end{aligned}$$

$$\begin{aligned} 12) \quad -\underline{3t} + -8 + \underline{7t} &= \cancel{34} + 9t \cancel{+ -2} \\ + -9t &\quad + -9t \\ -5t + -8 &= 32 \\ + 8 &\quad + 8 \\ (-\frac{1}{5})-5t &= 40(-\frac{1}{5}) \\ \boxed{t = -8} \end{aligned}$$

$$20) \quad 9 + (-6)(4u+1) = u+15$$

$$9 + -24u + 6 = u + 15$$

$$\begin{array}{r} -24u + 15 \\ + -u \\ \hline \end{array}$$

$$\begin{array}{r} -25u + 15 \\ + 15 \\ \hline \end{array}$$

$$\left(-\frac{1}{25}\right) - 25u = 0 \left(-\frac{1}{25}\right)$$

$$\boxed{u=0}$$

$$21) \quad 3(n+10) = 8n$$

$$3n + 30 = 8n$$

$$\begin{array}{r} + -8n \\ \hline \end{array}$$

$$\begin{array}{r} -5n + 30 = 0 \\ \hline \end{array}$$

$$\begin{array}{r} + -30 \\ \hline \end{array}$$

$$\left(-\frac{1}{5}\right) - 8n = -30 \left(-\frac{1}{5}\right)$$

$$\boxed{n=6}$$