Determining Variable Value to Balance Equations Name:

Find the value of x.

1) $5x + 2 = 52 + -5x$

2) $5x + 4 = 54 + 0x$

3) $3x + 28 = 82 - 3x$

4) $44 - 2x = 107 - 9x$

5) $5x + 44 = -1x + 56$

6) $2x + 49 = 0x + 65$

7) $4x + 72 = -5x + 99$

8) $15 + 2x = 31 - 6x$

9) $-3x + 66 = -13x + 116$

10) $-2x + 31 = -8x + 79$

11) $45 + -4x = 63 + -13x$

12) $4x + -14 = 22 + -2x$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Determining Variable Value to Balance Equations Name: **Answer Key**

Find the value of x.

1) 5x + 2 = 52 + -5x

10x = 50

x = 5

2) 5x + 4 = 54 + 0x

5x = 50

x = 10

3) 3x + 28 = 82 - 3x

6x = 54

x = 9

4) 44 - 2x = 107 - 9x

7x = 63

x = 9

5) 5x + 44 = -1x + 56

6x = 12

x = 2

6) 2x + 49 = 0x + 65

2x = 16

x = 8

7) 4x + 72 = -5x + 99

9x = 27

x = 3

8) 15 + 2x = 31 - 6x

8x = 16

x = 2

9) -3x + 66 = -13x + 116

10x = 50

x = 5

10) -2x + 31 = -8x + 79

6x = 48

x = 8

11) 45 + -4x = 63 + -13x

9x = 18

x = 2

12) 4x + -14 = 22 + -2x

6x = 36

x = 6

Answers

1. 5
2. 10
3. 9
4. 9
5. 2
6. 8
7. 3
8. 2
9. 5
10. 8
11. 2
12. 6

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Determining Variable Value to Balance Equations Name:

Find the value of x.

10	8	9	5	9
2	5	8	2	3

1) $5x + 2 = 52 + -5x$

2) $5x + 4 = 54 + 0x$

3) $3x + 28 = 82 - 3x$

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8) $15 + 2x = 31 - 6x$

9) $-3x + 66 = -13x + 116$

10) $-2x + 31 = -8x + 79$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

1-10	90	80	70	60	50	40	30	20	10	0