Linear Equations with Variables on Both Sides Name:

Identify the value of y.

1) $-9y+4-7 = 3+8y-57$

2) $7y+3\times8 = 2y+(4\times9)+3$

3) $-(3y\times9)\times7 = -2y\times5-1253$

4) $(2y-3\times3) = -(8+9y-8)+68$

5) $8-(9-3y) = -6+8+4y-11$

6) $4y-8\times8 = 9y+(8\times8)-148$

7) $(4y\times5) = -3+4\times5y+3$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

1-7	86	71	57	43	29	14	0

Linear Equations with Variables on Both Sides Name: **Answer Key**

Identify the value of y.

1) $-9y+4-7 = 3+8y-57$

$-30 = -30$

2) $7y+3\times8 = 2y+(4\times9)+3$

$45 = 45$

3) $-(3y\times9)\times7 = -2y\times5-1253$

$-1323 = -1323$

4) $(2y-3\times3) = -(8+9y-8)+68$

$5 = 5$

5) $8-(9-3y) = -6+8+4y-11$

$23 = 23$

6) $4y-8\times8 = 9y+(8\times8)-148$

$-48 = -48$

7) $(4y\times5) = -3+4\times5y+3$

$160 = 160$

Answers

1. **3**
2. **3**
3. **7**
4. **7**
5. **8**
6. **4**
7. **8**

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $(4+7\times3y) = 5y\times8+5-134$

2) $6y\times3 = (5\times5y)-4-17$

3) $-4\times2y\times7 = -(2-7y\times6)-586$

4) $6-3y = 8+(6y+4)-78$

5) $(2y+9) = 6\times8y-8-351$

6) $(4y+7+7) = -(2+5y)+52$

7) $9y(2+8) = 7+2y-8+617$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $(4+7\times3y) = 5y\times8+5-134$

151 = 151

2) $6y\times3 = (5\times5y)-4-17$

54 = 54

3) $-4\times2y\times7 = -(2-7y\times6)-586$

-336 = -336

4) $6-3y = 8+(6y+4)-78$

-18 = -18

5) $(2y+9) = 6\times8y-8-351$

25 = 25

6) $(4y+7+7) = -(2+5y)+52$

30 = 30

7) $9y(2+8) = 7+2y-8+617$

630 = 630

Answers

1. **7**
2. **3**
3. **6**
4. **8**
5. **8**
6. **4**
7. **7**

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $(8-2y) = -5+2y\times3-11$

2) $(6y-5) = -8y+9+42$

3) $9+(9\times3y) = (2\times8+6y)+35$

4) $-5y-4 = 6y+4-52$

5) $5+2y-6 = 4y\times8-4-267$

6) $(7\times2y) = (4\times6y)-60$

7) $7+4y = 5+9y+3-16$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $(8-2y) = -5+2y\times3-11$

$2 = 2$

2) $(6y-5) = -8y+9+42$

$19 = 19$

3) $9+(9\times3y) = (2\times8+6y)+35$

$63 = 63$

4) $-5y-4 = 6y+4-52$

$-24 = -24$

5) $5+2y-6 = 4y\times8-4-267$

$17 = 17$

6) $(7\times2y) = (4\times6y)-60$

$84 = 84$

7) $7+4y = 5+9y+3-16$

$19 = 19$

Answers

1. **3**
2. **4**
3. **2**
4. **4**
5. **9**
6. **6**
7. **3**

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $-2\times6-3y = 6y-5-4-30$

2) $(7y-4) = (4-2y)+46$

3) $-3\times2-6y = 8\times(5\times6y)-1974$

4) $(4y+4) = 6y-8+4$

5) $3+2-6y = (9y-9)-106$

6) $(5\times4y) = (9+4y)+23$

7) $9+3y = (3y+7)+2$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $-2\times6-3y = 6y-5-4-30$

$-21 = -21$

2) $(7y-4) = (4-2y)+46$

$38 = 38$

3) $-3\times2-6y = 8\times(5\times6y)-1974$

$-54 = -54$

4) $(4y+4) = 6y-8+4$

$20 = 20$

5) $3+2-6y = (9y-9)-106$

$-43 = -43$

6) $(5\times4y) = (9+4y)+23$

$40 = 40$

7) $9+3y = (3y+7)+2$

$15 = 15$

Answers

1. **3**
2. **6**
3. **8**
4. **4**
5. **8**
6. **2**
7. **2**

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $(2y+7) = 5y\times7-158$

2) $(3y-4) = -(2y\times7)+115$

3) $9-(5-7y) = 3-3y-5+66$

4) $(4y+4) = -4-(4y\times8)+116$

5) $3-(6y-3) = 2\times5y+4-30$

6) $4y\times8 = 7+(7\times6y)-57$

7) $-(3+8y) = 6+(4\times9y)-405$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $(2y+7) = 5y\times7-158$

17 = 17

2) $(3y-4) = -(2y\times7)+115$

17 = 17

3) $9-(5-7y) = 3-3y-5+66$

46 = 46

4) $(4y+4) = -4-(4y\times8)+116$

16 = 16

5) $3-(6y-3) = 2\times5y+4-30$

-6 = -6

6) $4y\times8 = 7+(7\times6y)-57$

160 = 160

7) $-(3+8y) = 6+(4\times9y)-405$

-75 = -75

Answers

1. **5**
2. **7**
3. **6**
4. **3**
5. **2**
6. **5**
7. **9**

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $2+2-8y = 9y+3\times5-45$

2) $-(7\times6y) = -7+4\times5y-551$

3) $8y\times9\times4 = 8y\times5+9+735$

4) $6-9y = (4+6y-9)-94$

5) $(3y+3) = 7-3y+8$

6) $-2+(9y\times7) = (4\times8y)+246$

7) $(3y\times3) = 7\times4y\times3-675$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $2+2-8y = 9y+3\times5-45$

-12 = -12

2) $-(7\times6y) = -7+4\times5y-551$

-378 = -378

3) $8y\times9\times4 = 8y\times5+9+735$

864 = 864

4) $6-9y = (4+6y-9)-94$

-57 = -57

5) $(3y+3) = 7-3y+8$

9 = 9

6) $-2+(9y\times7) = (4\times8y)+246$

502 = 502

7) $(3y\times3) = 7\times4y\times3-675$

81 = 81

Answers

1. **2**
2. **9**
3. **3**
4. **7**
5. **2**
6. **8**
7. **9**

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $6y-9 = -9+(6-8y)+106$

2) $(2y\times4) = 8+6y-6+10$

3) $7y+3+6 = -8+(9+6y)+13$

4) $-(5+4y) = (3-8y)-9+21$

5) $6y+2\times2 = -(9+5y)+46$

6) $(3\times7y) = 2\times(6y+7)+22$

7) $-2-6-6y = 5+5y-8-27$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $6y-9 = -9+(6-8y)+106$

39 = 39

2) $(2y\times4) = 8+6y-6+10$

48 = 48

3) $7y+3+6 = -8+(9+6y)+13$

44 = 44

4) $-(5+4y) = (3-8y)-9+21$

-25 = -25

5) $6y+2\times2 = -(9+5y)+46$

22 = 22

6) $(3\times7y) = 2\times(6y+7)+22$

84 = 84

7) $-2-6-6y = 5+5y-8-27$

-20 = -20

Answers

1. **8**
2. **6**
3. **5**
4. **5**
5. **3**
6. **4**
7. **2**

1-7	86	71	57	43	29	14	0

Linear Equations with Variables on Both Sides Name:

Identify the value of y.

1) $-9+8y\times 9 = -(5-7y)+321$

2) $8\times 5y = 8y+4+124$

3) $(2-3y-6) = -(2-3)\times 4y-18$

4) $2+3-7y = (2\times 5y)-63$

5) $(3-9y) = -3+4y-111$

6) $(5y\times 8) = -6y\times 4+576$

7) $3y+9 = 2-7y+67$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $-9+8y\times 9 = -(5-7y)+321$

351 = 351

2) $8\times 5y = 8y+4+124$

160 = 160

3) $(2-3y-6) = -(2-3)\times 4y-18$

-10 = -10

4) $2+3-7y = (2\times 5y)-63$

-23 = -23

5) $(3-9y) = -3+4y-111$

-78 = -78

6) $(5y\times 8) = -6y\times 4+576$

360 = 360

7) $3y+9 = 2-7y+67$

27 = 27

Answers

1. **5**
2. **4**
3. **2**
4. **4**
5. **9**
6. **9**
7. **6**

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $-(9-6-3y) = 4\times(3-9y)+258$

2) $-7+(7y+6) = (9y-2)-11$

3) $-3y+7 = -(6\times9y)+211$

4) $-7+4y-5 = 5+8y-53$

5) $(4-9y) = -(7y\times5)+160$

6) $-(4+6y) = 4y+6-40$

7) $-8y\times7 = -(6y-6)-256$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $-(9-6-3y) = 4\times(3-9y)+258$

18 = 18

2) $-7+(7y+6) = (9y-2)-11$

41 = 41

3) $-3y+7 = -(6\times9y)+211$

-5 = -5

4) $-7+4y-5 = 5+8y-53$

24 = 24

5) $(4-9y) = -(7y\times5)+160$

-50 = -50

6) $-(4+6y) = 4y+6-40$

-22 = -22

7) $-8y\times7 = -(6y-6)-256$

-280 = -280

Answers

1. **7**
2. **6**
3. **4**
4. **9**
5. **6**
6. **3**
7. **5**

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $5y+6 = -(6y+8)+80$

2) $5\times 9y = -7+4y+2+292$

3) $7-9y = (8y+7)+7-75$

4) $7+(7y\times 6) = 5y\times 3+223$

5) $-7-7y\times 8 = -(7y-3)-206$

6) $(7\times 7\times 7y) = 9y-4-7+2015$

7) $-(5y\times 3) = 5\times 6+5y-130$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

1-7	86	71	57	43	29	14	0

Identify the value of y.

1) $5y+6 = -(6y+8)+80$

36 = 36

2) $5\times 9y = -7+4y+2+292$

315 = 315

3) $7-9y = (8y+7)+7-75$

-29 = -29

4) $7+(7y\times 6) = 5y\times 3+223$

343 = 343

5) $-7-7y\times 8 = -(7y-3)-206$

-231 = -231

6) $(7\times 7\times 7y) = 9y-4-7+2015$

2058 = 2058

7) $-(5y\times 3) = 5\times 6+5y-130$

-75 = -75

Answers

1. **6**
2. **7**
3. **4**
4. **8**
5. **4**
6. **6**
7. **5**

1-7	86	71	57	43	29	14	0