1. 12*x* + 30 = 9*x*

12*x* + 30 – 9*x* = 9*x* – 9*x*

3*x* + 30 = 0

3*x* + 30 – 30 = 0 – 30

3*x* = −30

3*x*/3 = −30/3

***x* = −10**

1. 4*y* – 2 = 8*y* + 10

4*y* – 2 – 8*y* = 8*y* + 10 – 8*y*

−4*y* – 2 = 10

−4*y* – 2 + 2 = 10 + 2

−4*y* = 12

−4*y*/−4 = 12/−4

***y* = −3**

1. 3*y* > 10 – 2*y*

3*y* + 2*y* > 10 – 2*y* + 2*y*

5*y* > 10

5*y*/5 > 10/5

***y* > 5**

1. 7*x* + 2 ≤ *x* – 10

7*x* + 2 – *x* ≤ *x* – 10 – *x*

6*x* + 2 ≤ -10

6*x* + 2 – 2 ≤ -10 – 2

6*x* ≤ −12

6*x*/6 ≤ −12/6

***x* ≤ −2**

1. 4(−2*x* – 1) + 16*x* = *x* – 9*x* + 4

−8*x* – 4 + 16*x* = −8*x* + 4

8*x* – 4 = −8*x* + 4

8*x* – 4 + 8*x* = −8*x* + 4 + 8*x*

16*x* – 4 = 4

16*x* – 4 + 4 = 4 + 4

16*x* = 8

16*x*/16 = 8/16

***x* = 2**

1. −4*x* – 6(2*x* + 4) ≤ 2(*x* – 2) + 2*x*

−4*x* – 12 – 24 ≤ 2*x* – 4 + 2*x*

−4*x* – 36 ≤ 4*x* – 4

−4*x* – 36 – 4*x* ≤ 4*x* – 4 – 4*x*

−8*x* – 36 ≤ -4

−8*x* – 36 + 36 ≤ -4 + 36

−8*x* ≤ 32

−8*x*/−8 ≥ 32/−8

***x* ≥ −4**

1. 6*x* – *x* + 3 = 2 – 5*x* + 7

4*x* + 3 = −5*x* + 9

4*x* + 3 + 5*x* = −5*x* + 9 + 5*x*

9*x* + 3 = 9

9*x* + 3 – 3 = 9 – 3

9*x* = 6

9*x*/9 = 6/9

***x* = 2/3**

1. *y* + 3*y* + 8 ≥ 9 – 2*y* – 1

4*y* + 8 ≥ 8 – 2*y*

4*y* + 8 + 2*y* ≥ 8 – 2*y* + 2*y*

6*y* + 8 ≥ 8

6*y* + 8 – 8 ≥ 8 – 8

6*y* ≥ 0

6*y*/6 ≥ 0/6

***y* ≥ 0**