

Mathematics: Substitutions Demo

Demo - Set 3

Contents

| | |
|---|-----------|
| Title Page | 1 |
| Addition and Subtraction | 2 |
| Addition and Subtraction with Brackets | 3 |
| Addition and Subtraction with Brackets II | 4 |
| Addition and Subtraction with Brackets III | 5 |
| Addition and Subtraction with Brackets IV | 6 |
| Expressions with Parentheses | 7 |
| Expressions with Parentheses II | 9 |
| Expressions with Parentheses III | 10 |
| Expressions with Parentheses IV | 12 |
| Expressions with Parentheses V | 13 |
| Expressions with Parentheses VI | 14 |
| Challenge | 16 |
| Test 1 | 18 |
| Test 2 | 19 |
| Test 3 | 20 |
| Certificate | 21 |
| Solutions | 22 |
| Solutions: Test 1 | 24 |
| Solutions: Test 2 | 25 |
| Solutions: Test 3 | 26 |

1) Simplify algebraic expression

$$4x + 2x - 5x + 4x =$$

- a) Solve for $x = 2$ _____
b) Solve for $x = 0$ _____
c) Solve for $x = 3$ _____

2) Simplify algebraic expression

$$8x - 7x + 10x - 4x =$$

- a) Solve for $x = 1$ _____
b) Solve for $x = 2$ _____
c) Solve for $x = 0$ _____

3) Simplify algebraic expression

$$x + 0x + 6x + x =$$

- a) Solve for $x = 0$ _____
b) Solve for $x = 1$ _____
c) Solve for $x = 2$ _____

4) Simplify algebraic expression

$$10x - 6x + 8x - 6x =$$

- a) Solve for $x = 3$ _____
b) Solve for $x = 2$ _____
c) Solve for $x = 1$ _____

5) Simplify algebraic expression

$$4x + 6x - (9x - 4x) + (2 + 3) =$$

- a) Solve for $x = 0$ _____
- b) Solve for $x = 2$ _____
- c) Solve for $x = 3$ _____

6) Simplify algebraic expression

$$8 - 2 + 2x - (4 + 6 - 9) =$$

- a) Solve for $x = 3$ _____
- b) Solve for $x = 7$ _____
- c) Solve for $x = 6$ _____

7) Simplify algebraic expression

$$(7x - 4x) + 2x - 3x + 6 - 2 =$$

- a) Solve for $x = 7$ _____
- b) Solve for $x = 5$ _____
- c) Solve for $x = 4$ _____

8) Simplify algebraic expression

$$(6x - x + 8) - (8 - 1 - 3) =$$

- a) Solve for $x = 2$ _____
- b) Solve for $x = 1$ _____
- c) Solve for $x = 3$ _____

9) Simplify algebraic expression

$$4x - 3x + x + ((9x - 2x) - 0y) =$$

- a) Solve for $x = 1, y = 4$ _____
b) Solve for $x = 0, y = 0$ _____
c) Solve for $x = 1, y = 7$ _____

10) Simplify algebraic expression

$$((5x + 6x) + 7y - 0x) - (10y - 6y) =$$

- a) Solve for $x = 0, y = 6$ _____
b) Solve for $x = 0, y = 2$ _____
c) Solve for $x = 0, y = 3$ _____

11) Simplify algebraic expression

$$(x - 0x + 5y - 0y - 0x + 7y) =$$

- a) Solve for $x = 8, y = 0$ _____
b) Solve for $x = 7, y = 1$ _____
c) Solve for $x = 6, y = 0$ _____

12) Simplify algebraic expression

$$((7x + 7x) - 6x) + 4x - (0y - 0y) =$$

- a) Solve for $x = 1, y = 9$ _____
b) Solve for $x = 1, y = 2$ _____
c) Solve for $x = 0, y = 1$ _____

13) Simplify algebraic expression

$$((5y + z - 3z + 4z + 2x)) + z =$$

- a) Solve for $z = 5$, $x = 1$, $y = 0$ _____
b) Solve for $z = 0$, $x = 10$, $y = 0$ _____
c) Solve for $z = 4$, $x = 0$, $y = 1$ _____

14) Simplify algebraic expression

$$(3y + 10x - 2x - (y + 2y + 3x)) =$$

- a) Solve for $x = 2$, $y = 7$ _____
b) Solve for $x = 0$, $y = 1$ _____
c) Solve for $x = 4$, $y = 7$ _____

15) Simplify algebraic expression

$$(5y + 10y) - (2y - 0x) + 5y - 0y =$$

- a) Solve for $x = 5$, $y = 1$ _____
b) Solve for $x = 3$, $y = 1$ _____
c) Solve for $x = 0$, $y = 1$ _____

16) Simplify algebraic expression

$$((10z - z + 4y)) + 7x - (3x + 7z) =$$

- a) Solve for $z = 5$, $x = 0$, $y = 0$ _____
b) Solve for $z = 6$, $x = 0$, $y = 1$ _____
c) Solve for $z = 4$, $x = 1$, $y = 0$ _____

17) Simplify algebraic expression

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

- a) Solve for $y = 4$ _____
b) Solve for $y = 0$ _____
c) Solve for $y = 2$ _____

18) Simplify algebraic expression

$$(0y + 3) - (1 + (-10x)) + (-10x) - 10y =$$

- a) Solve for $x = 9, y = 2$ _____
b) Solve for $x = 6, y = 1$ _____
c) Solve for $x = 3, y = 0$ _____

19) Simplify algebraic expression

$$(8y - 3x) - (7x + 0x) + (-7x) - 10y =$$

- a) Solve for $x = 0, y = 3$ _____
b) Solve for $x = 0, y = 4$ _____
c) Solve for $x = 0, y = 0$ _____

20) Simplify algebraic expression

$$8x - 3y - (9 + 5x) + (2y - 11) =$$

- a) Solve for $x = 1, y = 2$ _____
b) Solve for $x = 9, y = 5$ _____
c) Solve for $x = 9, y = 0$ _____

21) Simplify algebraic expression

$$(9x + 0x - 0x) \times 0 + 35x \div 7 =$$

- a) Solve for $x = 0$ _____
b) Solve for $x = 2$ _____
c) Solve for $x = 1$ _____

22) Simplify algebraic expression

$$(9x \times 3 - 7x) - 7x - 4x \times 2 =$$

- a) Solve for $x = 2$ _____
b) Solve for $x = 0$ _____
c) Solve for $x = 1$ _____

23) Simplify algebraic expression

$$6x - 2x + (7x + x) - 6x - x =$$

- a) Solve for $x = 0$ _____
b) Solve for $x = 2$ _____
c) Solve for $x = 1$ _____

24) Simplify algebraic expression

$$(16x \div 4) - 0x \div (6x) \times 21x \div 3 =$$

- a) Solve for $x = 0$ _____
b) Solve for $x = 2$ _____
c) Solve for $x = 1$ _____

25) Simplify algebraic expression

$$(6x - 2x) \times (0x + 0x) + x + x =$$

- a) Solve for $x = 5$ _____
b) Solve for $x = 2$ _____
c) Solve for $x = 1$ _____

26) Simplify algebraic expression

$$(10x - 8x) + x - (15x \div 3 - 3x) =$$

- a) Solve for $x = 10$ _____
b) Solve for $x = 5$ _____
c) Solve for $x = 3$ _____

27) Simplify algebraic expression

$$(5x + 2x) + 0 \div (6x) \times 10x - 7x =$$

- a) Solve for $x = 7$ _____
b) Solve for $x = 10$ _____
c) Solve for $x = 5$ _____

28) Simplify algebraic expression

$$4x + 8x - (4x - 0x) + 3x - 8x =$$

- a) Solve for $x = 0$ _____
b) Solve for $x = 3$ _____
c) Solve for $x = 1$ _____

29) Simplify algebraic expression

$$((1 \times 2x + 8x) - 6x - (10x - 8x)) =$$

- a) Solve for $x = 5$ _____
b) Solve for $x = 3$ _____
c) Solve for $x = 4$ _____

30) Simplify algebraic expression

$$((6 - 3 + 5) \times 10x \div 10) \div (8x) =$$

- a) Solve for $x = 3$ _____
b) Solve for $x = 4$ _____
c) Solve for $x = 9$ _____

31) Simplify algebraic expression

$$((2 \times 1) + 10x) - 9x + 4x - 4x =$$

- a) Solve for $x = 6$ _____
b) Solve for $x = 5$ _____
c) Solve for $x = 3$ _____

32) Simplify algebraic expression

$$10 + 7x - ((8x - 4x + 4)) - 3 =$$

- a) Solve for $x = 2$ _____
b) Solve for $x = 0$ _____
c) Solve for $x = 1$ _____

33) Simplify algebraic expression

$$(9 \times (-4x) + 45x) - (6 + 5x) + (-4x) =$$

- a) Solve for $x = 7$ _____
b) Solve for $x = 4$ _____
c) Solve for $x = 5$ _____

34) Simplify algebraic expression

$$(3 - (-2x)) \div 1 + (72x \div 8 \div (9x)) =$$

- a) Solve for $x = 0$ _____
b) Solve for $x = 2$ _____
c) Solve for $x = 3$ _____

35) Simplify algebraic expression

$$(5x - (-4)) + (10 \times 1 - 3) \times (-2) =$$

- a) Solve for $x = 1$ _____
b) Solve for $x = 0$ _____
c) Solve for $x = 3$ _____

36) Simplify algebraic expression

$$0x \times (-3x) \div (-14) \div ((5x + 4)) + 5x =$$

- a) Solve for $x = 0$ _____
b) Solve for $x = 2$ _____
c) Solve for $x = 1$ _____

37) Simplify algebraic expression

$$(7x + (-11)) \times (0x \times (-2)) \div (6x) \div 6 =$$

- a) Solve for $x = 8$ _____
b) Solve for $x = 9$ _____
c) Solve for $x = 6$ _____

38) Simplify algebraic expression

$$30 \div (-10) - (36x \div 9 + (-1x)) + 2x =$$

- a) Solve for $x = 4$ _____
b) Solve for $x = 0$ _____
c) Solve for $x = 1$ _____

39) Simplify algebraic expression

$$(6x \div (-2)) + 8x \times (0x \times (-8)) \times 0 =$$

- a) Solve for $x = 2$ _____
b) Solve for $x = 0$ _____
c) Solve for $x = 3$ _____

40) Simplify algebraic expression

$$(6x + (-10) - (-5)) - (10x \times 0x) \div (-7x) =$$

- a) Solve for $x = 1$ _____
b) Solve for $x = 0$ _____
c) Solve for $x = 2$ _____

41) Simplify algebraic expression

$$(4x \div 1 \div (4x)) \times 10y + 2x - 0y =$$

- a) Solve for $x = 2, y = 0$ _____
b) Solve for $x = 4, y = 0$ _____
c) Solve for $x = 5, y = 0$ _____

42) Simplify algebraic expression

$$6x - 2x + (3y - 2y - 4x + 8x) =$$

- a) Solve for $x = 0, y = 8$ _____
b) Solve for $x = 0, y = 6$ _____
c) Solve for $x = 0, y = 4$ _____

43) Simplify algebraic expression

$$(6y + 6x) - 2x - (7y - y) + 2y =$$

- a) Solve for $x = 0, y = 1$ _____
b) Solve for $x = 1, y = 0$ _____
c) Solve for $x = 0, y = 4$ _____

44) Simplify algebraic expression

$$(y \times 7) + (12x \div 3) \div (4x) - 6y =$$

- a) Solve for $x = 2, y = 9$ _____
b) Solve for $x = 7, y = 1$ _____
c) Solve for $x = 2, y = 2$ _____

45) Simplify algebraic expression

$$(10z - 10z) + 4z - 0 \div ((8y + 10x)) =$$

- a) Solve for $z = 2$, $x = 5$, $y = 8$ _____
b) Solve for $z = 1$, $x = 5$, $y = 4$ _____
c) Solve for $z = 1$, $x = 8$, $y = 3$ _____

46) Simplify algebraic expression

$$4 \times 1 - (2 \times 2) + 7z - 0x =$$

- a) Solve for $z = 1$, $x = 2$ _____
b) Solve for $z = 1$, $x = 0$ _____
c) Solve for $z = 1$, $x = 6$ _____

47) Simplify algebraic expression

$$(0 \times 8 + 9z) \div ((8z - 3z - 4z)) =$$

- a) Solve for $z = 8$ _____
b) Solve for $z = 5$ _____
c) Solve for $z = 0$ _____

48) Simplify algebraic expression

$$(6z + y) + 3y \times 0z \times 10x - 0z =$$

- a) Solve for $z = 1$, $x = 0$, $y = 0$ _____
b) Solve for $z = 0$, $x = 4$, $y = 7$ _____
c) Solve for $z = 0$, $x = 2$, $y = 8$ _____

49) Simplify algebraic expression

$$(0 \div (-7) \times 10 \times (-8x)) \div 9 - 8 =$$

- a) Solve for $x = 1$ _____
- b) Solve for $x = 0$ _____
- c) Solve for $x = 6$ _____

50) Simplify algebraic expression

$$(6 + (-9y)) + (3 \times (-3) + (-1x)) \div (-1) =$$

- a) Solve for $x = 4, y = 1$ _____
- b) Solve for $x = 8, y = 2$ _____
- c) Solve for $x = 10, y = 3$ _____

51) Simplify algebraic expression

$$12 - (-1) \times (9 + (-3x)) + (-5) - 10y =$$

- a) Solve for $x = 5, y = 0$ _____
- b) Solve for $x = 7, y = 0$ _____
- c) Solve for $x = 2, y = 1$ _____

52) Simplify algebraic expression

$$(0 \div 3) \div (8y + (-3y)) \div (6x) \div 6 =$$

- a) Solve for $x = 9, y = 9$ _____
- b) Solve for $x = 0, y = 3$ _____
- c) Solve for $x = 10, y = 4$ _____

53) Simplify algebraic expression

$$4 + (-1x) \times (8 \div (-2) - 2 \times (-2)) =$$

- a) Solve for $x = 8$ _____
- b) Solve for $x = 9$ _____
- c) Solve for $x = 3$ _____

54) Simplify algebraic expression

$$(0y \times 6) \div (6y) \times 1x - 7 =$$

- a) Solve for $x = 7$, $y = 3$ _____
- b) Solve for $x = 2$, $y = 8$ _____
- c) Solve for $x = 6$, $y = 0$ _____

55) Simplify algebraic expression

$$0 \div (-8) \div ((3y + 8x)) + 42 \div 7 =$$

- a) Solve for $x = 9$, $y = 8$ _____
- b) Solve for $x = 9$, $y = 9$ _____
- c) Solve for $x = 1$, $y = 6$ _____

56) Simplify algebraic expression

$$40y \div (-8) - (-7y) + (2x + (-5x)) \div (-3) =$$

- a) Solve for $x = 5$, $y = 1$ _____
- b) Solve for $x = 2$, $y = 3$ _____
- c) Solve for $x = 6$, $y = 1$ _____

57) Simplify algebraic expression

$$((0x \times x + 4z \div 1)) + ((5 + 0) + (-5)) \div (-9) =$$

- a) Solve for $z = 0$, $x = 5$ _____
b) Solve for $z = 2$, $x = 4$ _____
c) Solve for $z = 2$, $x = 1$ _____

58) Simplify algebraic expression

$$(20z \div 5 \div (-4)) - (0 + 3x - 6) + 13 - 0y =$$

- a) Solve for $z = 0$, $x = 7$, $y = 9$ _____
b) Solve for $z = 8$, $x = 2$, $y = 0$ _____
c) Solve for $z = 3$, $x = 4$, $y = 6$ _____

59) Simplify algebraic expression

$$((1 \times (-6) \times 2z - 3y - (-9x)) - 2 \times 7 + 5z) =$$

- a) Solve for $z = 9$, $x = 9$, $y = 1$ _____
b) Solve for $z = 3$, $x = 4$, $y = 3$ _____
c) Solve for $z = 0$, $x = 4$, $y = 4$ _____

60) Simplify algebraic expression

$$49y \div (-7) \times 0z + (10z + (-3)) \times 2y + 0 \div (-9) =$$

- a) Solve for $z = 0$, $y = 1$ _____
b) Solve for $z = 10$, $y = 0$ _____
c) Solve for $z = 2$, $y = 0$ _____

61) Simplify algebraic expression

$$(((0 + 1 + 5y))) + (-7) + (((0z - 2z - (-6)) - 0)) =$$

- a) Solve for $z = 0$, $y = 2$ _____
b) Solve for $z = 2$, $y = 0$ _____
c) Solve for $z = 3$, $y = 1$ _____

62) Simplify algebraic expression

$$(8 - z + (-4)) \times (((0y \times (-3)) \div (-12))) \div (-8) \div 4 =$$

- a) Solve for $z = 1$, $y = 4$ _____
b) Solve for $z = 9$, $y = 5$ _____
c) Solve for $z = 4$, $y = 1$ _____

63) Simplify algebraic expression

$$(((80y \div 8 + 9) - 4y + (-2)) - ((2 + (-6y) + 7x))) =$$

- a) Solve for $x = 7$, $y = 3$ _____
b) Solve for $x = 1$, $y = 1$ _____
c) Solve for $x = 5$, $y = 3$ _____

64) Simplify algebraic expression

$$(6z \div (-6) - 7z - (5y \times (-1z))) \div (0 + 7 + (-2))) =$$

- a) Solve for $z = 4$, $y = 8$ _____
b) Solve for $z = 1$, $y = 5$ _____
c) Solve for $z = 6$, $y = 9$ _____

1) Simplify algebraic expression

$$8y - 5y - ((8y - 8y) + 3y) + 9x =$$

- a) Solve for $x = 0, y = 7$ _____
- b) Solve for $x = 2, y = 2$ _____
- c) Solve for $x = 1, y = 4$ _____

2) Simplify algebraic expression

$$9x - 14 + (3 - 4y) + (-4y) - 5y =$$

- a) Solve for $x = 10, y = 5$ _____
- b) Solve for $x = 4, y = 3$ _____
- c) Solve for $x = 1, y = 1$ _____

3) Simplify algebraic expression

$$(4x - 9y) - 0 \div (-8) + (-4y) - (-8y) =$$

- a) Solve for $x = 7, y = 6$ _____
- b) Solve for $x = 1, y = 2$ _____
- c) Solve for $x = 4, y = 4$ _____

4) Simplify algebraic expression

$$1 + (-7y) - (((0 \div (-2)) \div (4z))) \div (6x) \div ((2z - 16)) =$$

- a) Solve for $z = 4, x = 7, y = 1$ _____
- b) Solve for $z = 7, x = 1, y = 0$ _____
- c) Solve for $z = 1, x = 8, y = 0$ _____

1) Simplify algebraic expression

$$8x - x - ((0y - 0x) + 4x - 4x) =$$

- a) Solve for $x = 2, y = 0$ _____
- b) Solve for $x = 2, y = 1$ _____
- c) Solve for $x = 2, y = 4$ _____

2) Simplify algebraic expression

$$(3 - (-9y)) + (-3x) + (9 + (-4x)) - (-2x) =$$

- a) Solve for $x = 6, y = 1$ _____
- b) Solve for $x = 6, y = 4$ _____
- c) Solve for $x = 10, y = 5$ _____

3) Simplify algebraic expression

$$(7y + 0y + (-6x)) + (32x \div (-4)) + 4 =$$

- a) Solve for $x = 4, y = 6$ _____
- b) Solve for $x = 5, y = 8$ _____
- c) Solve for $x = 4, y = 8$ _____

4) Simplify algebraic expression

$$(0 \div (-5)) \div (((((1 - (-4z) + 5y)))) \div (-5) + 6 + 0z =$$

- a) Solve for $z = 10, y = 4$ _____
- b) Solve for $z = 0, y = 2$ _____
- c) Solve for $z = 9, y = 1$ _____

1) Simplify algebraic expression

$$((8y - 5y - y)) + 0x - 0x + 6y =$$

- a) Solve for $x = 2, y = 1$ _____
b) Solve for $x = 10, y = 1$ _____
c) Solve for $x = 6, y = 1$ _____

2) Simplify algebraic expression

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

- a) Solve for $y = 1$ _____
b) Solve for $y = 2$ _____
c) Solve for $y = 0$ _____

3) Simplify algebraic expression

$$(40 \div 4) + 0 \div (10x - (-10y)) \times 6y =$$

- a) Solve for $x = 1, y = 9$ _____
b) Solve for $x = 0, y = 5$ _____
c) Solve for $x = 9, y = 4$ _____

4) Simplify algebraic expression

$$(2z - (-5x) \times ((0y \times 2x) \div 3)) + (((6z + 8) - 9)) =$$

- a) Solve for $z = 1, x = 10, y = 3$ _____
b) Solve for $z = 0, x = 8, y = 1$ _____
c) Solve for $z = 1, x = 5, y = 6$ _____



Workulum.com

Certificate of Achievement



This certificate is awarded to

for successful completion of

Mathematics: Substitutions Demo

and demonstrating an understanding of the basic principles of Mathematics.

Presented on _____
Parent or Guardian

To learn more visit Workulum.com



MATHEMATICS: SUBSTITUTIONS DEMO (D-3)
 SOLUTIONS

| 1 | 2 | 3 | 4 |
|---|---------------------------------------|---------------------------------------|---|
| $5x$ a) 10 b) 0 c) 15 | $7x$ a) 7 b) 14 c) 0 | $8x$ a) 0 b) 8 c) 16 | $6x$ a) 18 b) 12 c) 6 |
| 5 | 6 | 7 | 8 |
| $5x + 5$ a) 5 b) 15 c) 20 | $2x + 5$ a) 11 b) 19 c) 17 | $2x + 4$ a) 18 b) 14 c) 12 | $5x + 4$ a) 14 b) 9 c) 19 |
| 9 | 10 | 11 | 12 |
| $9x$ a) 9 b) 0 c) 9 | $11x + 3y$ a) 18 b) 6 c) 9 | $x + 12y$ a) 8 b) 19 c) 6 | $12x$ a) 12 b) 12 c) 0 |
| 13 | 14 | 15 | 16 |
| $2x + 5y + 3z$ a) 17 b) 20 c) 17 | $5x$ a) 10 b) 0 c) 20 | $18y$ a) 18 b) 18 c) 18 | $4x + 4y + 2z$ a) 10 b) 16 c) 12 |
| 17 | 18 | 19 | 20 |
| $5y$ a) 20 b) 0 c) 10 | $-10y + 2$ a) -18 b) -8 c) 2 | $-17x - 2y$ a) -6 b) -8 c) 0 | $3x - y - 20$ a) -19 b) 2 c) 7 |
| 21 | 22 | 23 | 24 |
| $5x$ a) 0 b) 10 c) 5 | $5x$ a) 10 b) 0 c) 5 | $5x$ a) 0 b) 10 c) 5 | $4x$ a) 0 b) 8 c) 4 |
| 25 | 26 | 27 | 28 |
| $2x$ a) 10 b) 4 c) 2 | x a) 10 b) 5 c) 3 | 0 a) 0 b) 0 c) 0 | $3x$ a) 0 b) 9 c) 3 |
| 29 | 30 | 31 | 32 |
| $2x$ a) 10 b) 6 c) 8 | 1 a) 1 b) 1 c) 1 | $x + 2$ a) 8 b) 7 c) 5 | $3x + 3$ a) 9 b) 3 c) 6 |
| 33 | 34 | 35 | 36 |
| -6 a) -6 b) -6 c) -6 | $2x + 4$ a) 4 b) 8 c) 10 | $5x - 10$ a) -5 b) -10 c) 5 | $5x$ a) 0 b) 10 c) 5 |

MATHEMATICS: SUBSTITUTIONS DEMO (D-3)
 SOLUTIONS

| 37 | 38 | 39 | 40 |
|--------------------------------------|---|--|---|
| 0 a) 0 b) 0 c) 0 | $-x - 3$ a) -7 b) -3 c) -4 | $-3x$ a) -6 b) 0 c) -9 | $6x - 5$ a) 1 b) -5 c) 7 |
| 41 | 42 | 43 | 44 |
| $2x + 10y$ a) 4 b) 8 c) 10 | $8x + y$ a) 8 b) 6 c) 4 | $4x + 2y$ a) 2 b) 4 c) 8 | $y + 1$ a) 10 b) 2 c) 3 |
| 45 | 46 | 47 | 48 |
| $4z$ a) 8 b) 4 c) 4 | $7z$ a) 7 b) 7 c) 7 | 9 a) 9 b) 9 c) 9 | $y + 6z$ a) 6 b) 7 c) 8 |
| 49 | 50 | 51 | 52 |
| -8 a) -8 b) -8 c) -8 | $x - 9y + 15$ a) 10 b) 5 c) -2 | $-3x - 10y + 16$ a) 1 b) -5 c) 3.78183e-124 | 0 a) 0 b) 0 c) 0 |
| 53 | 54 | 55 | 56 |
| 4 a) 4 b) 4 c) 4 | -7 a) -7 b) -7 c) -7 | 6 a) 6 b) 6 c) 6 | $x + 2y$ a) 7 b) 8 c) 8 |
| 57 | 58 | 59 | 60 |
| $4z$ a) 0 b) 8 c) 8 | $-3x - z + 19$ a) -2 b) 5 c) 4 | $9x - 3y - 7z - 14$ a) 1 b) -8 c) 10 | $20yz - 6y$ a) -6 b) 0 c) 0 |
| 61 | 62 | 63 | 64 |
| $5y - 2z$ a) 10 b) -4 c) -1 | 0 a) 0 b) 0 c) 0 | $-7x + 12y + 5$ a) -8 b) 10 c) 6 | $yz - 8z$ a) 7.56366e-124 b) -3 c) 6 |

| 1 | 2 | 3 | 4 |
|-------|-----------------|-----------|-----------|
| $9x$ | $9x - 13y - 11$ | $4x - 5y$ | $-7y + 1$ |
| a) 0 | a) 14 | a) -2 | a) -6 |
| b) 18 | b) -14 | b) -6 | b) 1 |
| c) 9 | c) -15 | c) -4 | c) 1 |

| 1 | 2 | 3 | 4 |
|-------|-----------------|-----------------|------|
| $7x$ | $-5x + 9y + 12$ | $-14x + 7y + 4$ | 6 |
| a) 14 | a) -9 | a) -10 | a) 6 |
| b) 14 | b) 18 | b) -10 | b) 6 |
| c) 14 | c) 7 | c) 4 | c) 6 |

| 1 | 2 | 3 | 4 |
|------|----------|-------|----------|
| $8y$ | $5y + 6$ | 10 | $8z - 1$ |
| a) 8 | a) 11 | a) 10 | a) 7 |
| b) 8 | b) 16 | b) 10 | b) -1 |
| c) 8 | c) 6 | c) 10 | c) 7 |