

QUICK COVER

Solving linear equations 2

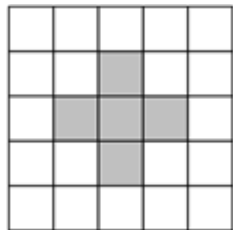
Task 1 : Solving $x + 6 = 12$ and $x - 8 = 5$

Task 2 : Solving $5x = 30$ and $x \div 6 = 7$

Task 3 : Solving $4x + 3 = 27$

Task 4 : Solving $5x - 4 = 31$

Puzzle : Mixture of **Tasks 3** and **4**



Help and hints.....

Solving linear equations 2

Remember that you must 'do the same' to the expressions on both sides of the equals sign.

TASK 1

1) $x + 3 = 7$

Subtract 3 from both sides

$$x + 3 - 3 = 7 - 3$$

$$x = 4$$

2) $x - 6 = 7$

Add 6 to both sides

$$x - 6 + 6 = 7 + 6$$

$$x = 13$$

TASK 3

$$4x + 3 = 35$$

Subtract 3 from both sides

$$4x = 32$$

Divide both sides by 4

$$x = 8$$

TASK 2

1) $6x = 42$

Divide both sides by 6

$$6x \div 6 = 42 \div 6$$

$$x = 7$$

2) $x \div 10 = 3$

Multiply both sides by 10

$$x \div 10 \times 10 = 3 \times 10$$

$$x = 30$$

TASK 4

$$5x - 2 = 18$$

Add 2 to both sides

$$5x = 20$$

Divide both sides by 5

$$x = 4$$

Solving Linear Equations 2

| TASK 1 | TASK 2 | TASK 3 | TASK 4 |
|-------------------|----------------------|---------------------|---------------------|
| 1. $x + 3 = 12$ | 1. $x \div 8 = 9$ | 1. $10x + 4 = 114$ | 1. $8x - 6 = 34$ |
| 2. $x - 1 = 13$ | 2. $8x = 72$ | 2. $7x + 2 = 65$ | 2. $3x - 8 = 28$ |
| 3. $x + 18 = 22$ | 3. $5x = 15$ | 3. $8x + 7 = 79$ | 3. $3x - 7 = 14$ |
| 4. $x - 6 = 9$ | 4. $x \div 9 = 9$ | 4. $2x + 10 = 20$ | 4. $12x - 6 = 90$ |
| 5. $x + 9 = 21$ | 5. $10x = 90$ | 5. $5x + 10 = 70$ | 5. $4x - 3 = 13$ |
| 6. $x + 22 = 32$ | 6. $3x = 12$ | 6. $5x + 11 = 66$ | 6. $10x - 10 = 70$ |
| 7. $x + 5 = 12$ | 7. $x \div 8 = 2$ | 7. $10x + 12 = 112$ | 7. $10x - 8 = 62$ |
| 8. $x - 4 = 15$ | 8. $5x = 30$ | 8. $12x + 3 = 87$ | 8. $12x - 9 = 51$ |
| 9. $x + 12 = 20$ | 9. $x \div 4 = 10$ | 9. $12x + 12 = 36$ | 9. $4x - 8 = 24$ |
| 10. $x - 1 = 15$ | 10. $3x = 21$ | 10. $3x + 3 = 36$ | 10. $6x - 3 = 9$ |
| 11. $x - 1 = 17$ | 11. $x \div 11 = 11$ | 11. $9x + 11 = 92$ | 11. $8x - 6 = 66$ |
| 12. $x - 5 = 6$ | 12. $x \div 9 = 5$ | 12. $6x + 10 = 22$ | 12. $5x - 6 = 34$ |
| 13. $x + 10 = 15$ | 13. $10x = 30$ | 13. $6x + 6 = 48$ | 13. $3x - 10 = -4$ |
| 14. $x - 6 = 5$ | 14. $8x = 16$ | 14. $3x + 4 = 28$ | 14. $12x - 6 = 102$ |
| 15. $x - 5 = 15$ | 15. $x \div 8 = 4$ | 15. $9x + 7 = 115$ | 15. $9x - 5 = 40$ |

Solving Linear Equations 2

ANSWERS

| TASK 1 | TASK 2 | TASK 3 | TASK 4 |
|-------------|-------------|-------------|-------------|
| 1. $x = 2$ | 1. $x = 2$ | 1. $x = 2$ | 1. $x = 2$ |
| 2. $x = 4$ | 2. $x = 4$ | 2. $x = 4$ | 2. $x = 4$ |
| 3. $x = 3$ | 3. $x = 3$ | 3. $x = 3$ | 3. $x = 3$ |
| 4. $x = 5$ | 4. $x = 5$ | 4. $x = 5$ | 4. $x = 5$ |
| 5. $x = 2$ | 5. $x = 2$ | 5. $x = 2$ | 5. $x = 2$ |
| 6. $x = 0$ | 6. $x = 0$ | 6. $x = 1$ | 6. $x = 0$ |
| 7. $x = 1$ | 7. $x = 1$ | 7. $x = 0$ | 7. $x = 1$ |
| 8. $x = 9$ | 8. $x = 6$ | 8. $x = 6$ | 8. $x = 9$ |
| 9. $x = 1$ | 9. $x = 1$ | 9. $x = 1$ | 9. $x = 1$ |
| 10. $x = 5$ | 10. $x = 5$ | 10. $x = 5$ | 10. $x = 5$ |
| 11. $x = 3$ | 11. $x = 1$ | 11. $x = 1$ | 11. $x = 9$ |
| 12. $x = 2$ | 12. $x = 5$ | 12. $x = 5$ | 12. $x = 3$ |
| 13. $x = 1$ | 13. $x = 1$ | 13. $x = 1$ | 13. $x = 2$ |
| 14. $x = 1$ | 14. $x = 1$ | 14. $x = 1$ | 14. $x = 9$ |
| 15. $x = 0$ | 15. $x = 2$ | 15. $x = 2$ | 15. $x = 2$ |

