Foundation Algebra Questions

Solve

$x - 3 = 14$

$3x = 2$

$4x = 8$

$x - 8 = 5$

$5y = 45$

$x + x + x = 51$

$t + t + t = 12$

$n + 7 = 103$

$x - 3 = 0$

$x - 2 = 6$

$8 + w = 6$

$4x - 3 = 14$

$\frac{x}{5} = 2\frac{1}{2}$

$\frac{y}{4} = 3$

$\frac{m}{6} = 12$

$\frac{y}{4} = 10.5$

$2f + 7 = 18$

$6w + 2 = 20$

$3x - 8 = 19$

$4(x - 5) = 18$

$3(x - 4) = 12$

$3(m - 4) = 21$

$5x - 6 = 3(x - 1)$

$4(3x - 2) = 2x - 5$

$\frac{5 - x}{2} = 2x - 7$

$2x^2 = 72$

$x^2 = 196$

$x^2 + 5x - 24 = 0$

$x^2 - x - 12 = 0$

Solve the simultaneous equations

$3x + y = -4$
$3x - 4y = 6$

$x + 3y = 12$
$5x - y = 4$

$5x + y = 21$
$x - 3y = 9$

$3x - 4y = 11$
$9x + 2y = 5$

$2x + y = 18$
$x - y = 6$

Solve the inequality

$14n > 11n + 6$

$5(x + 3) < 60$

$8 > 3 - \frac{1}{2}x$

$7x + 6 > 1 + 2x$

$3x + 5 \geqslant x + 17$

Simplify

$4e + 6f + 7e - f$

$8x - 3 + 6x$

$5p - 3p + p$

$10 + 3c + 5d - 7c + d$

$y + 3y - 2y$

$8a - 3a + 2a$

$3m - m - m + 3m$

$m^3 + m^3$

$5a + 2 - a + 9$

$a \times a \times a + b + b$

$3a^2 + 7a + 3 - a^2 + 8a - 4$

$2 \times n \times p \times 4$

$3 \times 4t$

$3f \times 5g$

$t \times t$

$7 \times e \times f \times 8$

$\frac{2n + 6n}{2}$

$y \times y$

$3 \times a \times 3 \times a$

$a \times b \times 7$

$y \times y \times y$

$\frac{e \times e \times e \times f}{e \times e \times f \times f}$

$\frac{32q^9r^4}{4q^3r}$

$(5np^3)^3$

$m^3 \times m^4$

Expand and simplify

$5(x + 3) - x + 2$

$5(p + 3) - 2(1 - 2p)$

$n - (n + 1)$

$7x - (3x - 2x)$

$(x + 5)(x - 1)$

$(5x + 2)(2x - 3)$

$(2x + 1)(3x - 2)$

$(x - 8)^2$

Factorise

$3n + 12$

$5 - 10m$

$9b - 3b^2$

$2a^2b + 6ab^2$

$24y^2 - 20y$

$x^2 + 6x + 9$

$x^2 + 4x + 3$

$x^2 - 100$