Oefening 2

Naam: _____ Klas: _____

Opgave 1 Herleid:

$\frac{1}{3}-\frac{5}{12}$
$14-5\frac{2}{11}$
$2\frac{1}{5}-3\frac{7}{8}$
$-8\frac{4}{9}-3\frac{1}{3}$
$\frac{3}{10}.\frac{-5}{12}$
$\frac{34}{75}:\frac{51}{100}$
$7\cdot 5\frac{2}{3}$
$\frac{8}{13}\cdot 4\frac{1}{3}$
$\frac{6}{7}:\frac{8}{15}$
$4\frac{2}{3}:5$

Opgave 2 Schrijf zo kort mogelijk:

$4x^2 - (3x + 7x^2) + 6x$
$2x(4x - 8) - 9x(x + 2)$
$4x - (5 - 9x) - \frac{1}{2}(2x + 5)$
$\frac{1}{3}(x - 2) - \frac{1}{2}.(2x + 5)$

Opgave 3 Herleid:

$(5x^3y)^2 \, (-3xy^2)^2 \, 2xy^3$
$-(a^6b^4)^3 \cdot (-ab^2)^5$
$\frac{30a^5b^7}{5ab^4}$
$\frac{(-xy^2)^3}{-(x^2y)^2}$
$\frac{9xy^5}{15x^4y^3}$
$\frac{x^5y^3}{xy^2} : \frac{xy^3}{x^2y}$

Opgave 4 Herleid de volgende wortels:

$\sqrt{45} + \sqrt{20}$
$4\sqrt{2} \cdot 2\sqrt{10}$
$2\sqrt{3} - 6\sqrt{7} + \sqrt{63} + 9\sqrt{12}$
$(5\sqrt{10})^3$
$\left(-2\sqrt{3}\right)^4$

Opgave 5 Herleid:

$4x(2x - 8) - 3(x^2 - x + 5)$
$(x - 3)^2$
$(2x - 4)(\frac{1}{2}x + 5)$
$(2x + 7)^2$
$(x + 10)(x - 10)$
$x(x - 5)(x + 7)$
$(5x^2 - 4)(3x^2 + 10x + 2)$
$(\frac{1}{2}x - 6)^2$

Opgave 6 Ontbind in factoren:

$-4x^2 - 28x$
$x^2 - 14x + 49$
$x^2 + 3x - 40$
$x^3 - 16x$
$^1/_3x^3 - 2x^2 + 6x$
$½\ p^2q^3 - 4p^5q^7$
$x^2 - 20$
$t^3 + 3t^2 + 2t$

Opgave 7 Los op:

$^1/_3x - 4 = ½\ (x - 2) + 5$
$9x - 20(x + 5) > 8(3x - 6)$
$^1/_4\ (2x - 9) - ½\ (5 + x) = x - 10$
$¼\ x - {}^1/_5(x + 10) < ½\ (x - 6)$

Opgave 8 Los op:

$5x^2 = 20$
$x^2 = 2x + 8$
$3x^2 = 2x$
$2x^2 = 10$
$\frac{1}{2} x^2 + 3 = 3(x + 1)$
$x(x + 5) = 24$