

Oefeningen niveau 1

Oefening 1. Vereenvoudig indien mogelijk.

$$1. \frac{x^2 - y^2}{x - y} = x + y$$

$$2. \frac{x^2 + 2x + 1}{x^2 - 1} = \frac{x + 1}{x - 1}$$

$$3. \frac{a^2 - 9}{a^2 - 6a + 9} = \frac{a + 3}{a - 3}$$

$$4. \frac{x^4 - a^4}{x^2 - a^2} = x^2 + a^2$$

$$5. \frac{2x^2 - 5x + 3}{-4x^2 + 8x - 3} = \frac{1 - x}{2x - 1}$$

Oefening 2. Pas eerst (kruisgewijs) vereenvoudigen toe vooraleer de breuken te vermenigvuldigen.

$$1. \frac{3(a - b)}{a(a + b)} \cdot \frac{a^2}{9(a - b)} = \frac{a}{3a + 3b}$$

$$2. \frac{(x + 3)^2}{(x + 3)(x - 2)} \cdot \frac{x + 1}{x + 3} = \frac{x + 1}{x - 2}$$

$$3. \frac{(x + 1)(x - 2)}{x^2(x + 3)} \cdot \frac{x^2}{(x - 3)(x + 1)} = \frac{x - 2}{x^2 - 9}$$

$$4. \frac{4(x - 2)}{10(x + 2)^2} \cdot \frac{15(x + 2)}{2(x - 1)} = \frac{x - 2}{x^2 + x - 2}$$

$$5. \frac{6a^3}{a + 4} \cdot \frac{(a + 4)^2}{24a^2} = \frac{1}{4}a(a + 4)$$