

Selbsttest: Binomische Formeln mit Brüchen

– III Quadratische Ergänzung

Aufgaben	
$\frac{9}{25}t^2 - \frac{6}{5}tg$	
$v^2 - \frac{6}{5}vp$	
$\frac{9}{16}z^2 - \frac{3}{2}ze$	
$81b^2 + 162bi$	
$\frac{121}{64}i^2 + \frac{33}{20}ip$	
$\frac{81}{64}v^2 + \frac{5}{4}vx$	
$\frac{16}{121}e^2 + \frac{40}{77}eh$	
$144e^2 + 12en$	
$\frac{4}{25}q^2 + \frac{11}{5}qf$	
$f^2 - \frac{22}{7}fd$	
$\frac{1}{100}u^2 - \frac{1}{2}us$	
$q^2 + \frac{4}{5}qg$	

Aufgaben	Lösungen
$\frac{9}{25}t^2 - \frac{6}{5}tg$	$\frac{9}{25}t^2 - \frac{6}{5}tg + g^2 = \left(\frac{3}{5}t - g\right)^2$
$v^2 - \frac{6}{5}vp$	$v^2 - \frac{6}{5}vp + \frac{9}{25}p^2 = \left(v - \frac{3}{5}p\right)^2$
$\frac{9}{16}z^2 - \frac{3}{2}ze$	$\frac{9}{16}z^2 - \frac{3}{2}ze + e^2 = \left(\frac{3}{4}z - e\right)^2$
$81b^2 + 162bi$	$81b^2 + 162bi + 81i^2 = (9b + 9i)^2$
$\frac{121}{64}i^2 + \frac{33}{20}ip$	$\frac{121}{64}i^2 + \frac{33}{20}ip + \frac{9}{25}p^2 = \left(\frac{11}{8}i + \frac{3}{5}p\right)^2$
$\frac{81}{64}v^2 + \frac{5}{4}vx$	$\frac{81}{64}v^2 + \frac{5}{4}vx + \frac{25}{81}x^2 = \left(\frac{9}{8}v + \frac{5}{9}x\right)^2$
$\frac{16}{121}e^2 + \frac{40}{77}eh$	$\frac{16}{121}e^2 + \frac{40}{77}eh + \frac{25}{49}h^2 = \left(\frac{4}{11}e + \frac{5}{7}h\right)^2$
$144e^2 + 12en$	$144e^2 + 12en + \frac{1}{4}n^2 = \left(12e + \frac{1}{2}n\right)^2$
$\frac{4}{25}q^2 + \frac{11}{5}qf$	$\frac{4}{25}q^2 + \frac{11}{5}qf + \frac{121}{16}f^2 = \left(\frac{2}{5}q + \frac{11}{4}f\right)^2$
$f^2 - \frac{22}{7}fd$	$f^2 - \frac{22}{7}fd + \frac{121}{49}d^2 = \left(f - \frac{11}{7}d\right)^2$
$\frac{1}{100}u^2 - \frac{1}{2}us$	$\frac{1}{100}u^2 - \frac{1}{2}us + \frac{25}{4}s^2 = \left(\frac{1}{10}u - \frac{5}{2}s\right)^2$
$q^2 + \frac{4}{5}qg$	$q^2 + \frac{4}{5}qg + \frac{4}{25}g^2 = \left(q + \frac{2}{5}g\right)^2$