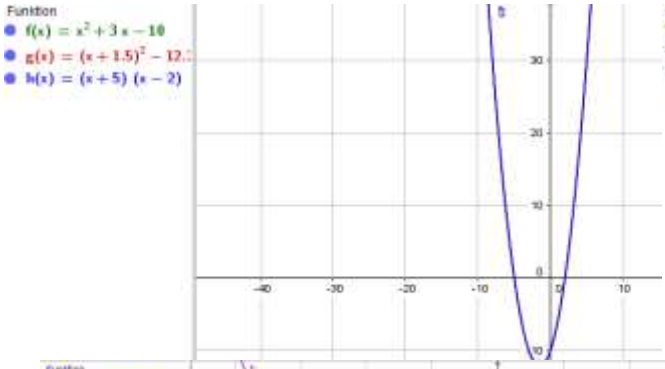
Überprüfe ob es sich um dieselbe Funktion handelt:

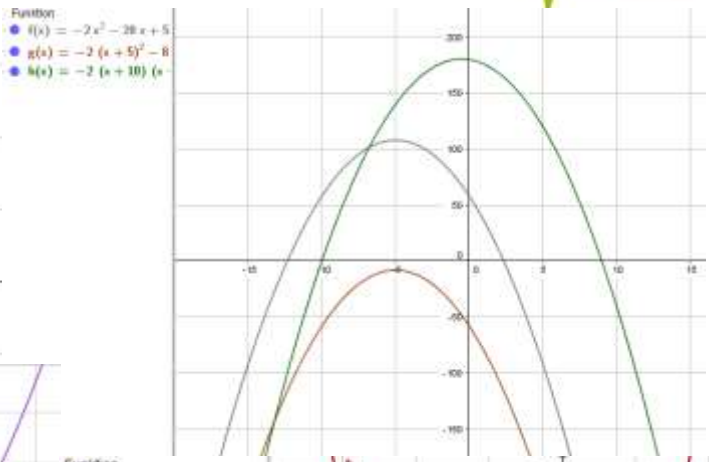
Normalform	Scheitelpunktform	Faktorisierte Form	alle Formeln gleich
$y = x^2+3x-10$	$y = (x + 1{,}5)^2 - 12{,}25$	$y = (x + 5)(x - 2)$	
$y = -2x^2 - 20x + 58$	$y = -2(x + 5)^2 - 8$	$y = -2\ (x + 10)(x - 9)$	
$y = x^2 + 4x -5$	$y = (x + 2)^2 - 9$	$y = (x - 1)(x + 5)$	
$y = x^2 + 7x +10$	$y = (x + 3{,}5)^2 + 2{,}25$	$y = (x + 5)(x+2)$	
$y = \frac{1}{2} x^2 - 4x + 11$	$y = \frac{1}{2}(x - 4)^2 + 3$	$y = 0{,}5\ (x + 2)\ (x+ 3)$	
$y = 2x^2 + 12x + 16$	$y = 2(x + 3)^2 -2$	$y = 2(x - 3)(x - 4)$	
$y = x^2 - 7x + 12$	$y =(x - 3{,}5)^2 - \frac{1}{2}$	$y = (x - 3)(x - 4)$	
$y = 2x^2 - 2x - 4$	$y = 2(x - 0{,}5)^2 - \frac{9}{2}$	$y = 2\ (x-2)(x+1)$	
$y = 3x^2 - 3x - 6$	$y = 3(x - \frac{1}{2})^2 - 6{,}75$	$y = 3(x + 1)(x - 2)$	

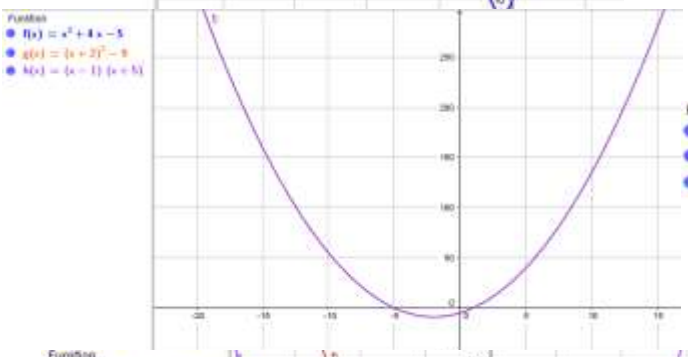
Lösung:

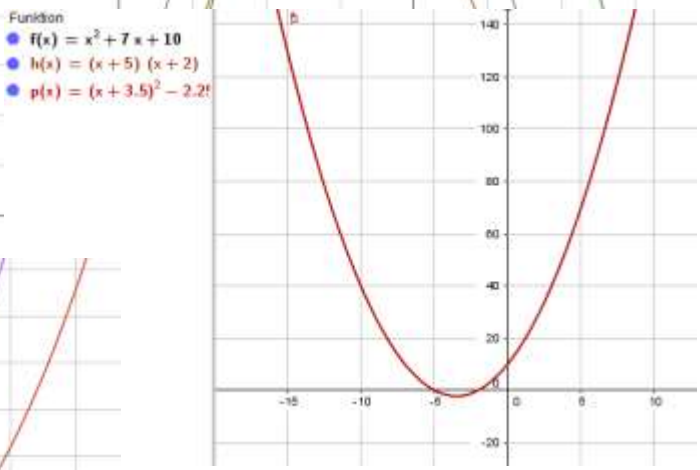
Normalform	Scheitelpunktform	Faktorisierte Form	alle Formeln gleich
$y = x^2+3x-10$	$y = (x + 1{,}5)^2 - 12{,}25$	$y = (x + 5)(x - 2)$	ja
$y = -2x^2 - 20x + 58$	$y = -2(x + 5)^2 - 8$	$y = -2\,(x + 10)(x - 9)$	nein
$y = x^2 + 4x - 5$	$y = (x + 2)^2 - 9$	$y = (x - 1)(x + 5)$	ja
$y = x^2 + 7x + 10$	$y = (x + 3{,}5)^2 - 2{,}25$	$y = (x + 5)(x+2)$	ja
$y = \frac{1}{2} x^2 - 4x + 11$	$y = \frac{1}{2}(x - 4)^2 + 3$	$y = 0{,}5\,(x + 2)\,(x+ 3)$	nein
$y = 2x^2 + 12x + 16$	$y = 2(x + 3)^2 - 2$	$y = 2(x - 3)(x - 4)$	nein
$y = x^2 - 7x + 12$	$y = (x - 3{,}5)^2 - \frac{1}{2}$	$y = (x - 3)(x - 4)$	ja
$y = 2x^2 - 2x - 4$	$y = 2(x - 0{,}5)^2 - \frac{9}{2}$	$y = 2\,(x-2)(x+1)$	ja
$y = 3x^2 - 3x - 6$	$y = 3(x - \frac{1}{2})^2 - 6{,}75$	$y = 3(x + 1)(x - 2)$	ja

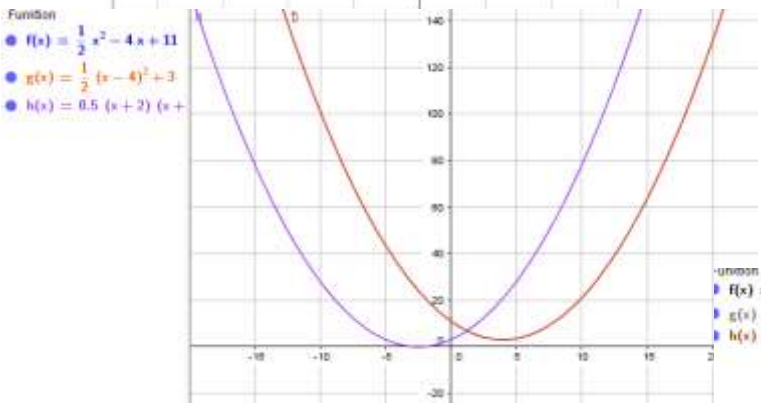
Mathe-AG Lernwerkstatt Mathematik

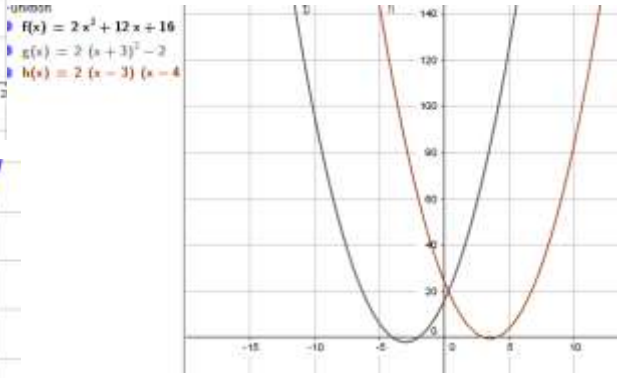


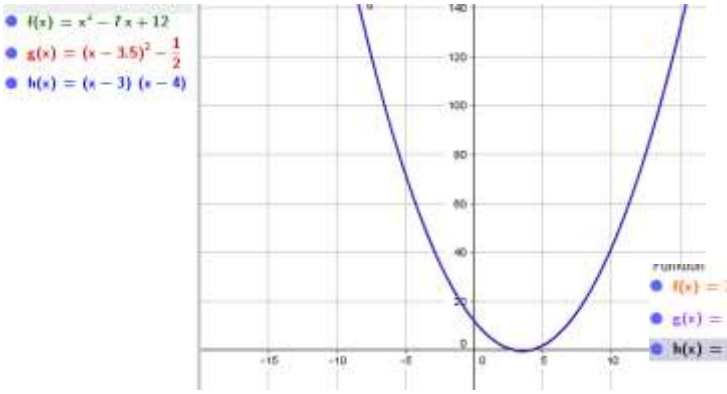


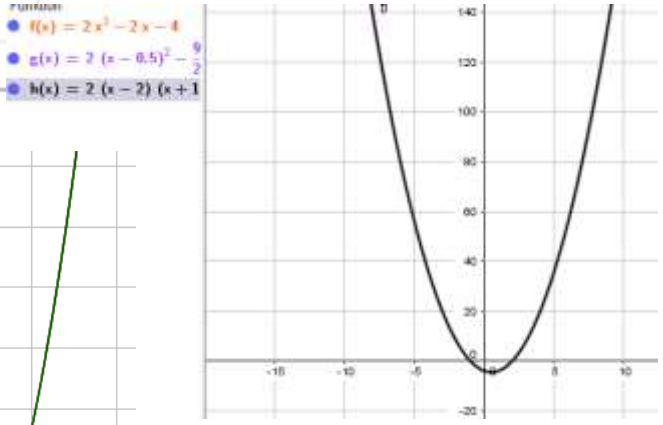


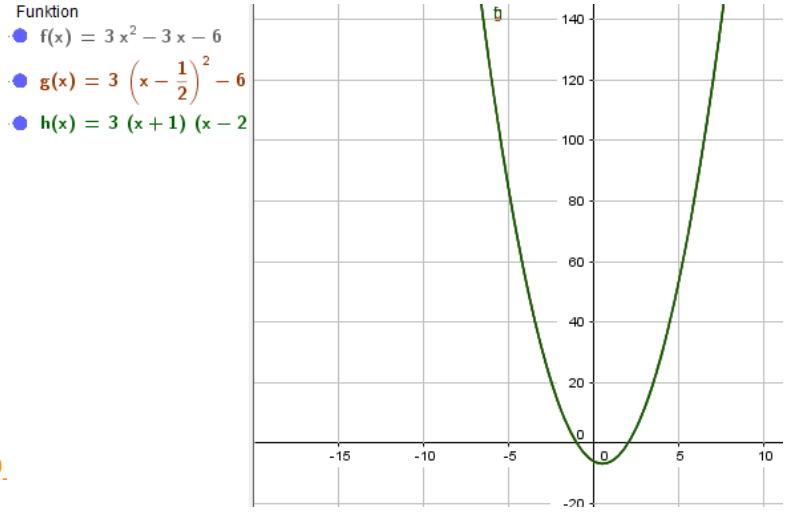












Erstellt mit GeoGebra 4.0