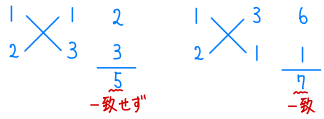
10

・たすきがけによる因数分解

(例)次の式を因数分解せよ。

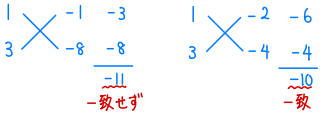
(1) $2x^2+7x+3=(x+3)(2x+1)$ //



1×3+2×1=5 ー致せず

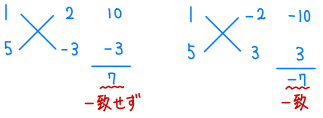
1×6+2×3=7 ー致

(2) $3x^2-10x+8=(x-2)(3x-4)$ //



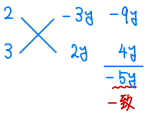
1×(-4)+3×(-2)=-10 ー致

(3) $5x^2-7x-6=(x-2)(5x+3)$ //



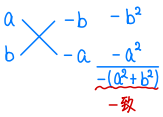
1×3+5×(-2)=-7 ー致

(4) $6x^2-5xy-6y^2=(2x-3y)(3x+2y)$ //



2×2y+3×(-3y)=-5y ー致

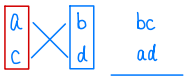
(5) $abx^2-(a^2+b^2)x+ab=(ax-b)(bx-a)$ //



a×(-a)+b×(-b)=-(a²+b²) ー致

(参考) なぜ、この方法(たすきがけ)で上手くいくのか？

4 $acx^2+(ad+bc)x+bd=(ax+b)(cx+d)$



ー致するようなa.b.c.dの組を見つける