



基本功专项训练(十一) 因式分解的运用

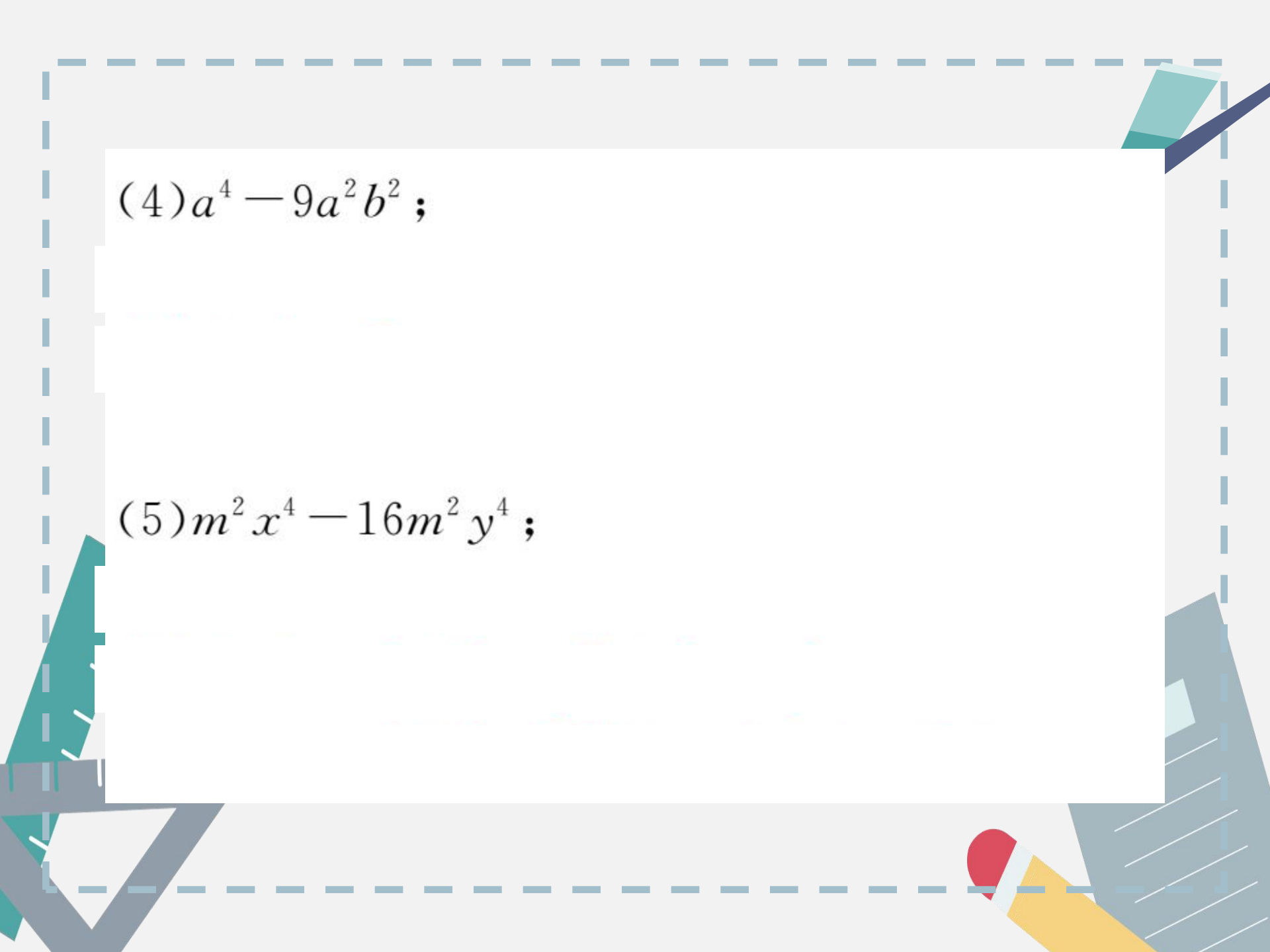


1. 因式分解：

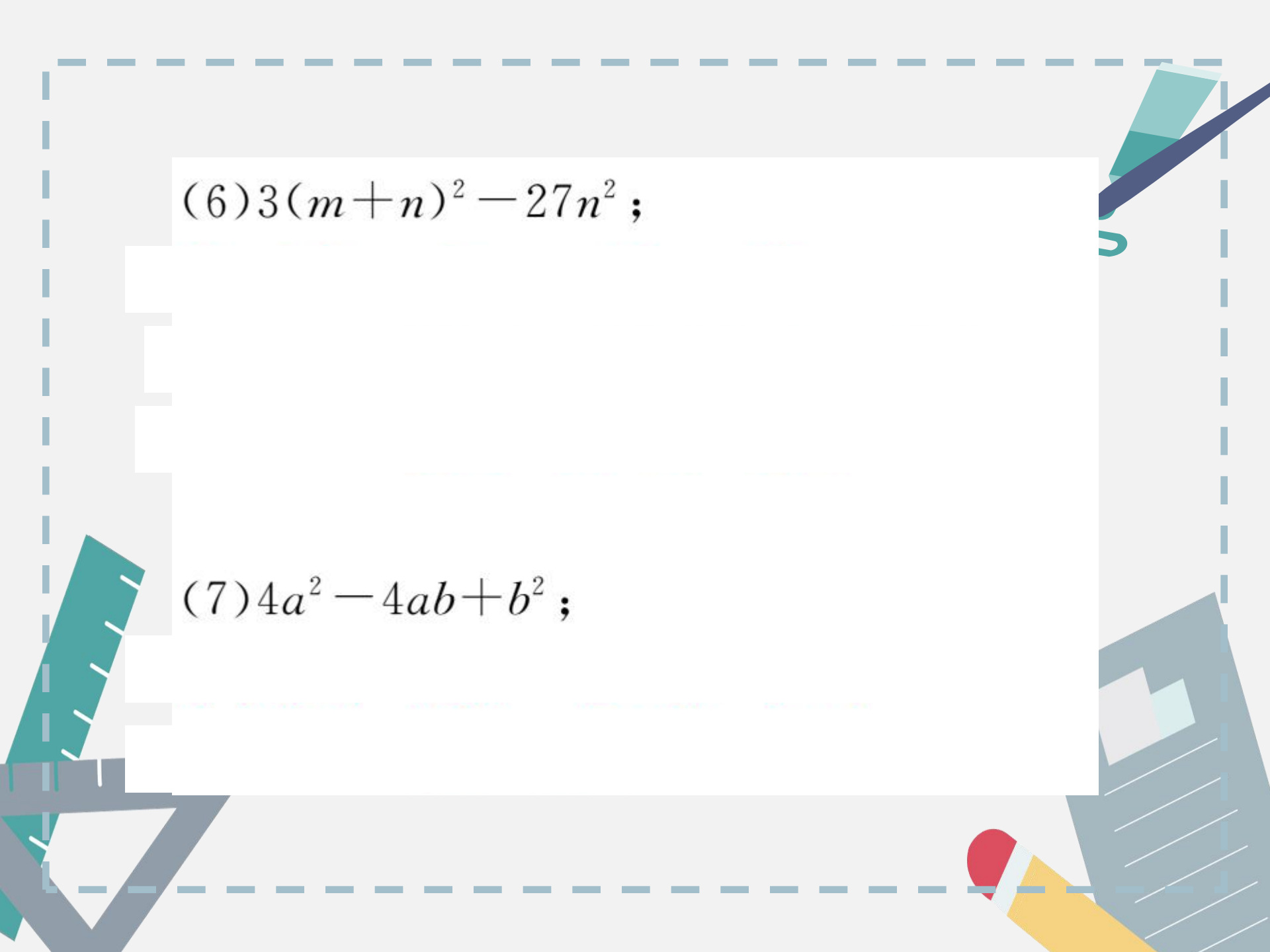
$$(1) 9x^2 - 6xy + 3x;$$

$$(2) (a-b)^3 - (a-b)^2;$$

$$(3) 3m(x-y) - n(y-x);$$


$$(4) a^4 - 9a^2b^2 ;$$

$$(5) m^2x^4 - 16m^2y^4 ;$$

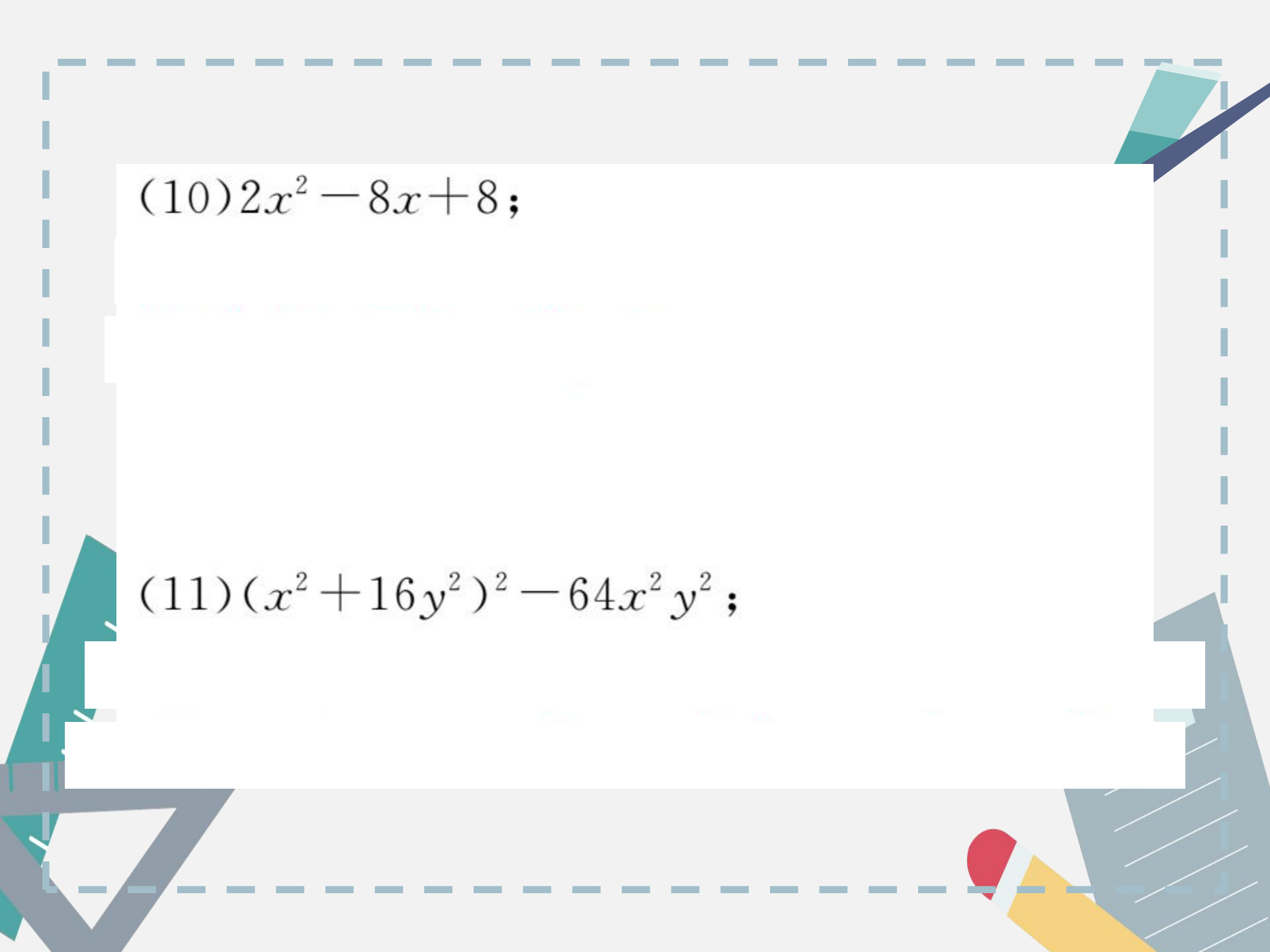


(6) $3(m+n)^2 - 27n^2$;

(7) $4a^2 - 4ab + b^2$;

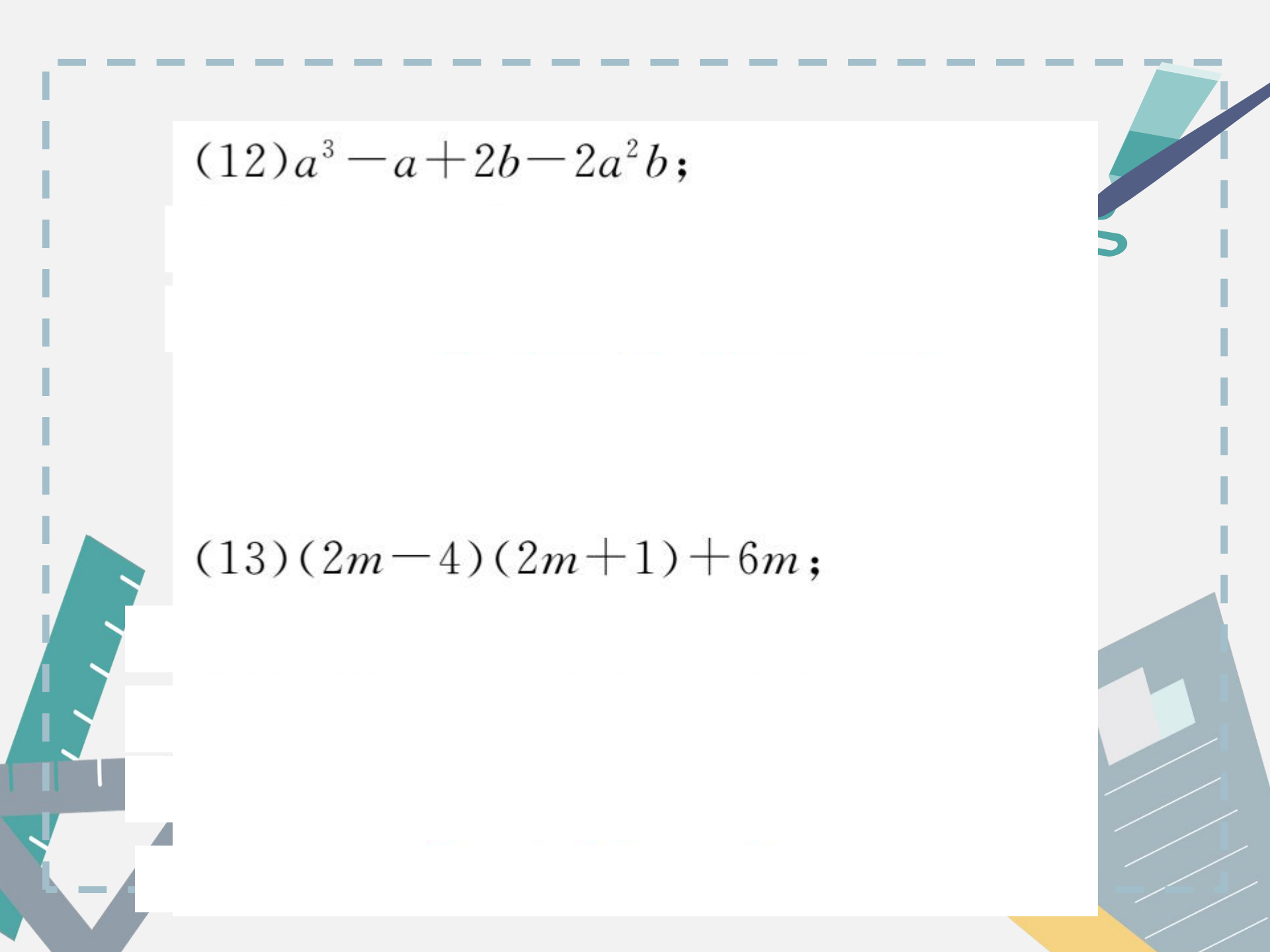
$$(8) (a^2 - 4)^2 + 6(a^2 - 4) + 9;$$

$$(9) (\text{在实数范围内分解因式}) x^4 - 9;$$

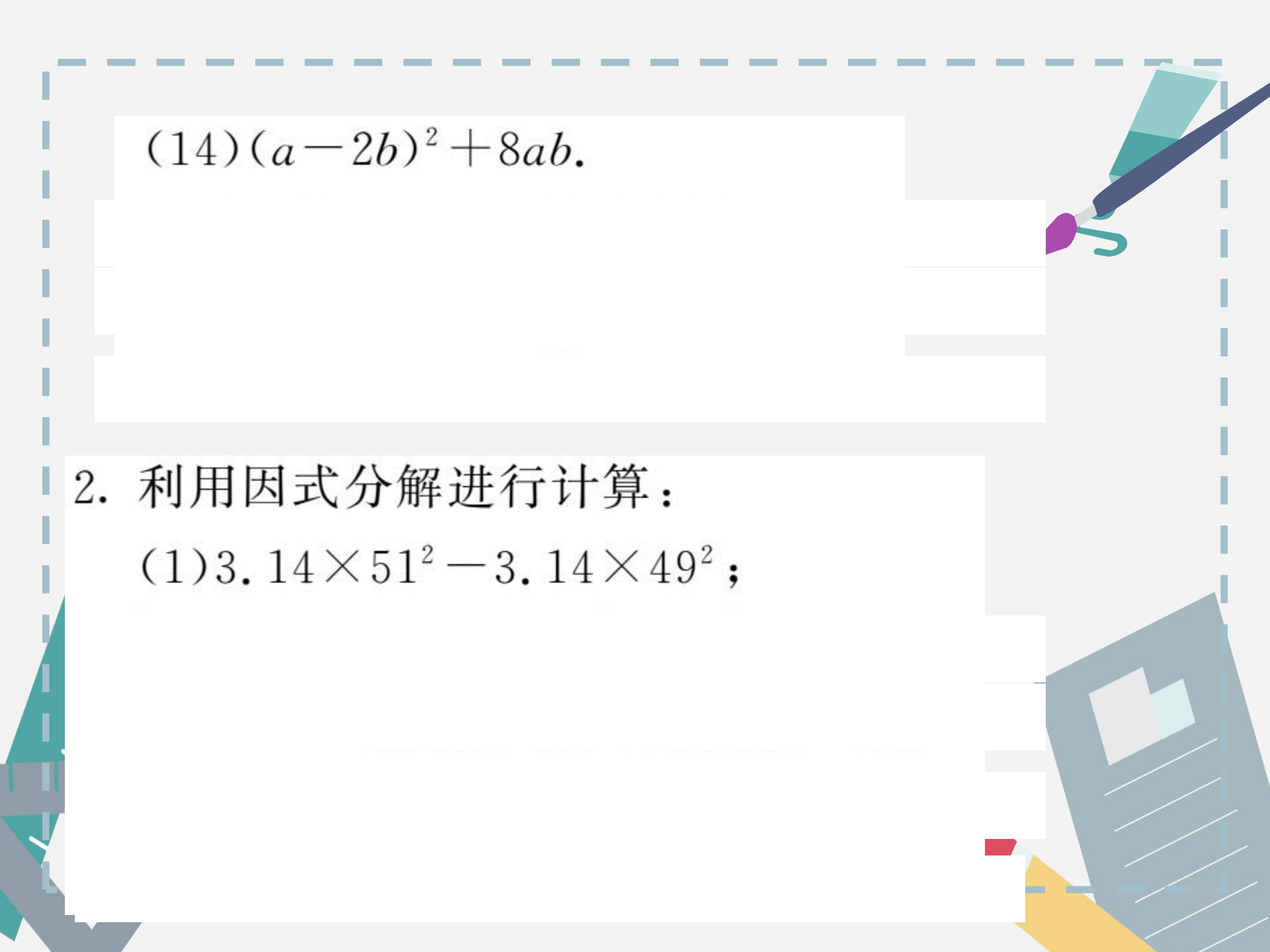


(10) $2x^2 - 8x + 8;$

(11) $(x^2 + 16y^2)^2 - 64x^2y^2;$


$$(12) a^3 - a + 2b - 2a^2 b;$$

$$(13) (2m - 4)(2m + 1) + 6m;$$


$$(14) (a-2b)^2 + 8ab.$$

2. 利用因式分解进行计算：

$$(1) 3.14 \times 51^2 - 3.14 \times 49^2;$$



(2) $2020^2 + 400 - 40 \times 2020.$