

$$(13) \frac{3(x+2)^2(x-3)^2 - (x+2)^3(2)(x-3)}{(x-3)^4}$$

$$\frac{(x+2)^2(x-3) [3(x-3) - (x+2)(2)]}{(x-3)^4}$$

$$\frac{(x+2)^2(x-3)(3x-9-2x-4)}{(x-3)^4}$$

$$\frac{(x+2)^2(x-3)(x-13)}{(x-3)^4}$$

$$\boxed{\frac{(x+2)^2(x-13)}{(x-3)^3}}$$

$$(14) \frac{3(x+2)^2 - 6x(x+2)}{x+2}$$

$$\frac{3(x+2) [(x+2) - 2x]}{(x+2)}$$

$$3(x+2-2x)$$

$$\boxed{\frac{3}{2}(-x+2)}$$
