$$n$$
이 자연수일 때,  $(ab)^n = a^n b^n$   $((ab)^n = a^n b^n (n \text{ is a natural number.}))$ 

→ Start



 $(ab)^n$ 

$$(ab)^n = \underbrace{ab \times \cdots \times ab}_n$$

$$(ab)^{n} = \underbrace{ab \times \cdots \times ab}_{n}$$

$$= \underbrace{(a \times b) \times \cdots \times (a \times b)}_{n}$$

→ Start

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$$= a^{n}$$

→ Start

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$$= a^{n} \times$$

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$$= a^{n} \times b^{n}$$

$$(ab)^{n} = \underbrace{ab \times \cdots \times ab}_{n}$$

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$$= a^{n} \times b^{n} = a^{n}b^{n}$$

▶ Start

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$$\therefore (ab)^{n} = a^{n}b^{n}$$



**END**