

指数法則

$$\star^{\bullet} \times \star^{\blacktriangle} = \star^{\bullet + \blacktriangle}$$

$$3^{\frac{5}{2}} \times 3^{\frac{3}{2}}$$

指数法則

$$\star^{\bullet} \times \star^{\blacktriangle} = \star^{\bullet + \blacktriangle}$$

$$3^{\frac{5}{2}} \times 3^{\frac{3}{2}} = 3^{\frac{5}{2} + \frac{3}{2}}$$

指数法則

$$\star^{\circ} \times \star^{\triangle} = \star^{\circ + \triangle}$$

$$\begin{aligned} 3^{\frac{5}{2}} \times 3^{\frac{3}{2}} &= 3^{\frac{5}{2} + \frac{3}{2}} \\ &= 3^{\frac{8}{2}} \end{aligned}$$

指数法則

$$\star^{\circ} \times \star^{\triangle} = \star^{\circ+\triangle}$$

$$\begin{aligned} 3^{\frac{5}{2}} \times 3^{\frac{3}{2}} &= 3^{\frac{5}{2} + \frac{3}{2}} \\ &= 3^{\frac{8}{2}} \\ &= 3^4 \\ &= 81 \end{aligned}$$

答

$$\star^{\circ} \div \star^{\triangle} = \star^{\circ - \triangle}$$

$$2^{\frac{9}{2}} \div 2^{\frac{5}{2}}$$

$$\star^{\circ} \div \star^{\triangle} = \star^{\circ - \triangle}$$

$$2^{\frac{9}{2}} \div 2^{\frac{5}{2}} = 2^{\frac{9}{2} - \frac{5}{2}}$$

$$\star^{\circ} \div \star^{\triangle} = \star^{\circ - \triangle}$$

$$\begin{aligned} 2^{\frac{9}{2}} \div 2^{\frac{5}{2}} &= 2^{\frac{9}{2} - \frac{5}{2}} \\ &= 2^{\frac{4}{2}} \end{aligned}$$

$$\star^{\circ} \div \star^{\triangle} = \star^{\circ - \triangle}$$

$$\begin{aligned} 2^{\frac{9}{2}} \div 2^{\frac{5}{2}} &= 2^{\frac{9}{2} - \frac{5}{2}} \\ &= 2^{\frac{4}{2}} \\ &= 2^2 \\ &= 4 \quad \boxed{\text{答}} \end{aligned}$$



$$\sqrt{\text{★} \text{◆}} = \text{★} \frac{\text{◆}}{\text{■}}$$

$$(\text{★} \text{●})^{\text{▲}} = \text{★} \text{●} \times \text{▲}$$

$$\left(\sqrt[3]{5^2}\right)^6$$

$$\sqrt{\star \diamond} = \star \frac{\diamond}{\square}$$

$$(\star \circ)^\triangle = \star \circ \times \triangle$$

$$\left(\sqrt[3]{5^2}\right)^6 = \left(5^{\frac{2}{3}}\right)^6$$

$$\sqrt[\text{purple square}]{\text{green star} \text{ yellow diamond}} = \text{green star} \frac{\text{yellow diamond}}{\text{purple square}}$$

$$(\text{green star} \text{ orange circle})^{\text{blue triangle}} = \text{green star} \text{ orange circle} \times \text{blue triangle}$$

$$\begin{aligned} \left(\sqrt[3]{5^2}\right)^6 &= \left(5^{\frac{2}{3}}\right)^6 \\ &= 5^{\frac{2}{3} \times 6} \end{aligned}$$

$$\sqrt[\text{purple square}]{\text{green star} \times \text{yellow diamond}} = \text{green star} \times \frac{\text{yellow diamond}}{\text{purple square}}$$

$$(\text{green star} \times \text{orange circle})^{\text{blue triangle}} = \text{green star} \times \text{orange circle} \times \text{blue triangle}$$

$$\begin{aligned} (\sqrt[3]{5^2})^6 &= \left(5^{\frac{2}{3}}\right)^6 \\ &= 5^{\frac{2}{3} \times 6} \\ &= 5^4 \\ &= 625 \quad \boxed{\text{答}} \end{aligned}$$

$$\sqrt{\text{★} \text{◆}} = \text{★} \frac{\text{◆}}{\text{■}}$$

$$\text{★} \text{●} \times \text{★} \text{▲} = \text{★} \text{●} + \text{▲}$$

$$\sqrt[6]{5^4} \times \sqrt[3]{5^4}$$

$$\sqrt[\square]{\star \diamond} = \star \frac{\diamond}{\square}$$

$$\star \circ \times \star \triangle = \star \circ + \triangle$$

$$\sqrt[6]{5^4} \times \sqrt[3]{5^4} = 5^{\frac{4}{6}} \times 5^{\frac{4}{3}}$$

$$\sqrt{\text{★} \text{◆}} = \text{★} \frac{\text{◆}}{\text{■}}$$

$$\text{★} \text{●} \times \text{★} \text{▲} = \text{★} \text{●} + \text{▲}$$

$$\begin{aligned} \sqrt[6]{5^4} \times \sqrt[3]{5^4} &= 5^{\frac{4}{6}} \times 5^{\frac{4}{3}} \\ &= 5^{\frac{2}{3}} \times 5^{\frac{4}{3}} \end{aligned}$$

$$\sqrt[\color{purple}{\square}]{\color{green}{\star}\color{orange}{\diamond}} = \color{green}{\star}\color{purple}{\frac{\diamond}{\square}}$$

$$\color{green}{\star}\color{orange}{\circ} \times \color{green}{\star}\color{blue}{\triangle} = \color{green}{\star}\color{orange}{\circ} + \color{blue}{\triangle}$$

$$\begin{aligned}\sqrt[6]{5^4} \times \sqrt[3]{5^4} &= 5^{\frac{4}{6}} \times 5^{\frac{4}{3}} \\ &= 5^{\frac{2}{3}} \times 5^{\frac{4}{3}} \\ &= 5^{\frac{2}{3} + \frac{4}{3}} = 5^{\frac{6}{3}} \\ &= 5^2 = 25 \quad \boxed{\text{答}}\end{aligned}$$




$$\sqrt{\square \star \diamond} = \star \frac{\diamond}{\square}$$

$$\sqrt{5^3} \div \sqrt[6]{125}$$

$$\sqrt{\text{★} \text{◆}} = \text{★} \frac{\text{◆}}{\text{■}}$$

$$\sqrt{5^3} \div \sqrt[6]{125} = \sqrt{5^3} \div \sqrt[6]{5^3}$$

$$\sqrt{\color{purple}\blacksquare \color{green}\star \color{orange}\blacklozenge} = \color{green}\star \color{purple}\frac{\blacklozenge}{\square}$$

$$\begin{aligned} \sqrt{5^3} \div \sqrt[6]{125} &= \sqrt{5^3} \div \sqrt[6]{5^3} \\ &= \sqrt[2]{5^3} \div \sqrt[6]{5^3} \end{aligned}$$

$$\sqrt{5^3} = \sqrt[2]{5^3} \quad \color{orange}2 \text{ が省略されてる}$$

$$\sqrt{\color{purple}\square \color{green}\star \color{orange}\diamond} = \color{green}\star \color{purple}\square \color{orange}\diamond$$

$$\begin{aligned} \sqrt{5^3} \div \sqrt[6]{125} &= \sqrt{5^3} \div \sqrt[6]{5^3} \\ &= \sqrt[2]{5^3} \div \sqrt[6]{5^3} \\ &= 5^{\frac{3}{2}} \div 5^{\frac{3}{6}} \end{aligned}$$

$\sqrt{5^3} = \sqrt[2]{5^3}$  2 が省略されてる

$$\sqrt{\color{purple}\square \color{green}\star \color{orange}\diamond} = \color{green}\star \color{purple}\frac{\color{orange}\diamond}{\color{purple}\square}$$

$$\begin{aligned} \sqrt{5^3} \div \sqrt[6]{125} &= \sqrt{5^3} \div \sqrt[6]{5^3} \\ &= \sqrt[2]{5^3} \div \sqrt[6]{5^3} \\ &= 5^{\frac{3}{2}} \div 5^{\frac{3}{6}} \\ &= 5^{\frac{3}{2}} \div 5^{\frac{1}{2}} \end{aligned}$$

$$\sqrt{5^3} = \sqrt[2]{5^3} \quad \color{orange}2 \text{ が省略されてる}$$

$$\star^{\circ} \div \star^{\triangle} = \star^{\circ - \triangle}$$

$$= 5^{\frac{3}{2}} \div 5^{\frac{1}{2}}$$

$$\star^{\bullet} \div \star^{\blacktriangle} = \star^{\bullet - \blacktriangle}$$

$$= 5^{\frac{3}{2}} \div 5^{\frac{1}{2}}$$

$$= 5^{\frac{3}{2} - \frac{1}{2}}$$

$$= 5^{\frac{2}{2}} = 5^1 = 5 \quad \boxed{\text{答}}$$