

Product rule

Quotient rule

Power rule

Negative exponents

Which of the following is equivalent to $9\sqrt{2} * 9\sqrt{2}$?

- | | | | |
|----------------|----------|-----------------|-----------------|
| a. $9\sqrt{2}$ | c. 9^4 | e. $81\sqrt{4}$ | g. $9\sqrt{4}$ |
| b. 81^2 | d. 9^2 | f. 81^4 | h. $81\sqrt{2}$ |

Which of the following is equivalent to $4(\sqrt{3}+2) * 4\sqrt{3}$?

- | | | | |
|----------------|--------------------|--------------------|---------------------|
| a. $4\sqrt{6}$ | c. 4^6 | e. 16^3 | g. $16(\sqrt{3}+1)$ |
| b. 16^6 | d. $4(\sqrt{3}+2)$ | f. $4(2+\sqrt{3})$ | h. $16\sqrt{6}$ |

Which of the following is equivalent to $4\sqrt{2} * 8\sqrt{2}$?

- | | | | |
|-----------|----------------|-----------------|----------------|
| a. 4^2 | c. 4^4 | e. $32\sqrt{2}$ | g. $4\sqrt{2}$ |
| b. 32^4 | d. $4\sqrt{4}$ | f. $32\sqrt{4}$ | h. 32^2 |

What is the value of $(6\sqrt{3})\sqrt{3}$?

What is the value of $\frac{5^{\sqrt{2}+3}}{5^{\sqrt{2}-3}}$?

Which of the following is equivalent to $8^{\sqrt{2}} * 8^{\sqrt{2}}$?

- a. $64^{\sqrt{4}}$
- b. $8^{\sqrt{4}}$
- c. 8^4
- d. $8^{\sqrt{2}}$
- e. 64^2
- f. 64^4
- g. $64^{\sqrt{2}}$
- h. 8^2

Which of the following is equivalent to $8^{\sqrt{2}+2} * 8^{\sqrt{2}}$?

- a. $8^{\sqrt{2}+2}$
- b. $8^{\sqrt{4}}$
- c. 8^4
- d. $64^{\sqrt{4}}$
- e. $8^{(2+\sqrt{2})}$
- f. 64^2
- g. $64^{\sqrt{2}+1}$
- h. 64^4

What is the value of $\frac{7^{\sqrt{2}+3}}{7^{\sqrt{2}-3}}$?