



## Exponents - Negative Fractional Exponents with Integer Base -

### Explanation to Radical

**1** Given the hint, what is the fractional exponent the same as?

$$36^{(-\frac{1}{2})} \cdot 36^{(-\frac{1}{2})} = \frac{1}{36}$$

$$36^{(-\frac{1}{2})} = ?$$

- |                          |                         |                 |                           |               |                          |
|--------------------------|-------------------------|-----------------|---------------------------|---------------|--------------------------|
| A $\frac{1}{3\sqrt{36}}$ | B $\frac{1}{\sqrt{36}}$ | C $\frac{1}{1}$ | D $\frac{1}{\sqrt{36^2}}$ | E $\sqrt{36}$ | F $\frac{1}{2\sqrt{36}}$ |
|--------------------------|-------------------------|-----------------|---------------------------|---------------|--------------------------|

**2** Given the hint, what is the fractional exponent the same as?

$$16^{(-\frac{1}{2})} \cdot 16^{(-\frac{1}{2})} = \frac{1}{16}$$

$$16^{(-\frac{1}{2})} = ?$$

- |                           |                        |                         |                 |                          |                          |
|---------------------------|------------------------|-------------------------|-----------------|--------------------------|--------------------------|
| A $\frac{1}{\sqrt{16^2}}$ | B $\frac{1}{\sqrt{4}}$ | C $\frac{1}{\sqrt{16}}$ | D $\frac{1}{1}$ | E $\frac{1}{4\sqrt{16}}$ | F $\frac{1}{5\sqrt{16}}$ |
|---------------------------|------------------------|-------------------------|-----------------|--------------------------|--------------------------|

**3** Given the hint, what is the fractional exponent the same as?

$$4^{(-\frac{1}{2})} \cdot 4^{(-\frac{1}{2})} = \frac{1}{4}$$

$$4^{(-\frac{1}{2})} = ?$$

- |                         |                         |                          |
|-------------------------|-------------------------|--------------------------|
| A $\frac{1}{5\sqrt{4}}$ | B $\frac{1}{3\sqrt{4}}$ | C $\frac{1}{\sqrt{3}}$   |
| D $\frac{1}{\sqrt{4}}$  | E $\frac{1}{1}$         | F $\frac{1}{\sqrt{4^2}}$ |

**4** Given the hint, what is the fractional exponent the same as?

$$25^{(-\frac{1}{2})} \cdot 25^{(-\frac{1}{2})} = \frac{1}{25}$$

$$25^{(-\frac{1}{2})} = ?$$

- |                          |                 |                          |                        |                           |                         |
|--------------------------|-----------------|--------------------------|------------------------|---------------------------|-------------------------|
| A $\frac{1}{3\sqrt{25}}$ | B $\frac{1}{1}$ | C $\frac{1}{2\sqrt{25}}$ | D $\frac{1}{\sqrt{2}}$ | E $\frac{1}{\sqrt{25^2}}$ | F $\frac{1}{\sqrt{25}}$ |
|--------------------------|-----------------|--------------------------|------------------------|---------------------------|-------------------------|

**5** Given the hint, what is the fractional exponent the same as?

$$9^{(-\frac{1}{2})} \cdot 9^{(-\frac{1}{2})} = \frac{1}{9}$$

$$9^{(-\frac{1}{2})} = ?$$

- |                         |                         |                        |
|-------------------------|-------------------------|------------------------|
| A $\frac{1}{\sqrt{2}}$  | B $\frac{1}{5\sqrt{9}}$ | C $\frac{1}{\sqrt{9}}$ |
| D $\frac{1}{4\sqrt{9}}$ | E $\frac{1}{\sqrt{4}}$  | F $\frac{1}{1}$        |