



Exponents - Fractional Exponents with Integer Base - Explanation to Answer

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

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

| | | | | | |
|---|----------------------|---|---------------|---|---|
| A | 2 | B | 4 | C | 3 |
| D | $\frac{1}{\sqrt{9}}$ | E | $\sqrt[3]{9}$ | F | 9 |

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

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

| | | | | | | | | | | | |
|---|---|---|----|---|-----------------------|---|---|---|----------------|---|---|
| A | 6 | B | 25 | C | $\frac{1}{\sqrt{25}}$ | D | 4 | E | $\sqrt[3]{25}$ | F | 5 |
|---|---|---|----|---|-----------------------|---|---|---|----------------|---|---|

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

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

| | | | | | | | | | | | |
|---|----|---|----------------|---|---|---|-----------------------|---|---|---|---|
| A | 36 | B | $\sqrt[3]{36}$ | C | 6 | D | $\frac{1}{\sqrt{36}}$ | E | 5 | F | 7 |
|---|----|---|----------------|---|---|---|-----------------------|---|---|---|---|

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

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

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

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

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

| | | | | | | | | | | | |
|---|-----------------------|---|----------------|---|---|---|---|---|---|---|----|
| A | $\frac{1}{\sqrt{16}}$ | B | $\sqrt[3]{16}$ | C | 5 | D | 3 | E | 4 | F | 16 |
|---|-----------------------|---|----------------|---|---|---|---|---|---|---|----|