New Maths GCSE: N7 - Laws of Indices Epic - positive, negative and fractional

Name:.. Date:......................................

6^2

What does this equal?

A 26   B 12

C 8   D 36

Correct Answer: A B C D

Explanation:

....
....
....
....
....
....

5^2

What does this equal?

A 25   B 7

C 10   D 52

Correct Answer: A B C D

Explanation:

....
....
....
....
....
....

10^2

What does this equal?

A 102   B 20

C 100   D 12

Correct Answer: A B C D

Explanation:

....
....
....
....
....
....

Question 1

$$2^3$$

What does this equal?

A 5   B 8

C 9   D 6

Correct Answer: A B C D

Explanation:

....

....

....

....

....

....

Question 2

$$3^3$$

What does this equal?

A 27   B 9

C 33   D 6

Correct Answer: A B C D

Explanation:

....

....

....

....

....

....

Question 3

$$2^4$$

What does this equal?

A 16   B 6

C 24   D 8

Correct Answer: A B C D

Explanation:

....

....

....

....

....

....

Question 4

$$6^{-1}$$

What does this equal?

A 5   B -6

C $\frac{1}{6}$ D $-\frac{1}{6}$

Correct Answer: A B C D

Explanation:

....

....

....

....

....

....

$$9^{-1}$$

What does this equal?

A $-\frac{1}{9}$ B -9

C 8 D $\frac{1}{9}$

Correct Answer: A B C D

Explanation:

....

....

....

....

....

....

$$10^{-1}$$

What does this equal?

A 0.1 B -10

C 9 D -0.1

Correct Answer: A B C D

Explanation:

....

....

....

....

....

....

$$\left(\frac{1}{4}\right)^{-1}$$

What does this equal?

A $-\frac{1}{4}$ B -4

C 4 D $-\frac{3}{4}$

Correct Answer: A B C D

Explanation:

....

....

....

....

....

....

$$\left(\frac{1}{5}\right)^{-1}$$

What does this equal?

A $-\frac{4}{5}$ B $-\frac{1}{5}$

C -5 D 5

Correct Answer: A B C D

Explanation:

....

....

....

....

....

....

$$\left(\frac{4}{5}\right)^{-1}$$

What does this equal?

A. $-\frac{4}{5}$ B. $-\frac{1}{5}$

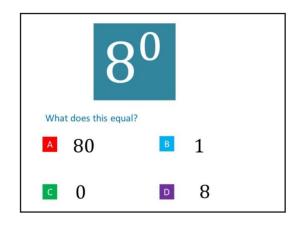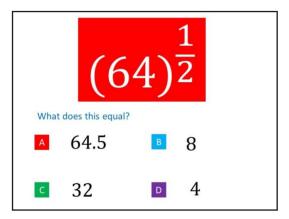C. 1.25 D. 5.4

Correct Answer: A B C D

Explanation:

....

....

....

....

....

....

$$5^{-2}$$

What does this equal?

A. $\frac{1}{25}$ B. -25

C. $-\frac{1}{10}$ D. $\frac{1}{10}$

Correct Answer: A B C D

Explanation:

....

....

....

....

....

....

$$8^{-2}$$

What does this equal?

A. -64 B. $\frac{1}{16}$

C. $-\frac{1}{64}$ D. $\frac{1}{64}$

Correct Answer: A B C D

Explanation:

....

....

....

....

....

....

$$2^{0}$$

What does this equal?

A. 2 B. 20

C. 1 D. 0

Correct Answer: A B C D

Explanation:

....

....

....

....

....

....

Question 1

$$8^0$$

What does this equal?

A	80	B	1
C	0	D	8

Correct Answer: A B C D

Explanation:

....
....
....
....
....
....

Question 2

$$(64)^{\frac{1}{2}}$$

What does this equal?

A	64.5	B	8
C	32	D	4

Correct Answer: A B C D

Explanation:

....
....
....
....
....
....

Question 3

$$(100)^{\frac{1}{2}}$$

What does this equal?

A	10	B	50
C	105	D	100.5

Correct Answer: A B C D

Explanation:

....
....
....
....
....
....

Question 4

$$(27)^{\frac{1}{3}}$$

What does this equal?

A	3	B	27.3333 ...
C	9	D	81

Correct Answer: A B C D

Explanation:

....
....
....
....
....
....

$$(8)^{\frac{1}{3}}$$

What does this equal?

A. 24   B. 4

C. 8.333 …   D. 2

Correct Answer: A B C D

Explanation:

....
....
....
....
....
....

$$(64)^{\frac{2}{3}}$$

What does this equal?

A. 8   B. 16

C. 64.666 …   D. 512

Correct Answer: A B C D

Explanation:

....
....
....
....
....
....

$$(9)^{\frac{3}{2}}$$

What does this equal?

A. 10.5   B. 9

C. 27   D. 13.5

Correct Answer: A B C D

Explanation:

....
....
....
....
....
....

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

What does this equal?

A. 3.5   B. $\frac{1}{2}$

C. -2 D. 2

Correct Answer: A B C D

Explanation:

....
....
....
....
....
....

Question 1

$$\left(\frac{4}{9}\right)^{-\frac{1}{2}}$$

What does this equal?

A $\quad -\frac{16}{81}$ B $\quad \frac{2}{3}$

C $\quad \frac{3}{2}$ D $\quad -\frac{2}{3}$

Correct Answer: A B C D

Explanation:

....

....

....

....

....

....

Question 2

$$\left(\frac{8}{27}\right)^{-\frac{2}{3}}$$

What does this equal?

A $\quad -\frac{4}{9}$ B $\quad -\frac{4}{6}$

C $\quad \frac{4}{9}$ D $\quad \frac{9}{4}$

Correct Answer: A B C D

Explanation:

....

....

....

....

....

....

Question 3

$$(125)^{-\frac{2}{3}}$$

What does this equal?

A $\quad \frac{1}{10}$ B $\quad \frac{1}{25}$

C $\quad -25$ D $\quad -\frac{1}{25}$

Correct Answer: A B C D

Explanation:

....

....

....

....

....

....