$$4 \bullet 4 \bullet 4$$

Write the expression using exponents.

1 POINTS

A

$$5 \bullet 5 \bullet 5 \bullet 5$$

Write the expression using exponents.

1 POINTS

B

$$2^3 \quad \text{or} \quad 3^2$$

Which is larger?

1 POINTS

C

$$2^5 \quad \text{or} \quad 5^2$$

Which is larger?

1 POINTS

D

$$\frac{1}{2} \bullet \frac{1}{2} \bullet \frac{1}{2}$$

Write the expression using exponents.

1 POINTS

E

$$\frac{1}{5} \bullet \frac{1}{5}$$

Write the expression using exponents.

1 POINTS

F

$$\sqrt{25}$$

What is the value?

1 POINTS

G

$$\sqrt{81}$$

What is the value?

1 POINTS

H

$$\frac{1}{100}$$

Write the expression with a base of 10 and negative exponents.

1 POINTS

I

$$\frac{1}{10,000}$$

Write the expression with a base of 10 and negative exponents.

1 POINTS

J

$$\sqrt[3]{8}$$

What is the value?

1 POINTS

K

$$\sqrt[3]{-8}$$

What is the value?

1 POINTS

L

$$\sqrt[3]{0}$$

What is the value?

1 POINTS

M

$$a \bullet a \bullet a$$

Write the expression using exponents.

2 POINTS

N

$$b \bullet b \bullet b \bullet b \bullet b$$

Write the expression using exponents.

2 POINTS

O

$$ab^2 \text{ or } a^2b$$

for $a = 2; b = 3$

Which is larger?

2 POINTS

P

$$a^b \text{ or } b^a$$

for $a = 3; b = 4$

Which is larger?

2 POINTS

Q

$$\frac{1}{w} \cdot \frac{1}{w} \cdot \frac{1}{w}$$

Write the expression using negative exponents.

2 POINTS

R

$$\frac{2}{r} \cdot \frac{2}{r}$$

Write the expression using negative exponents.

2 POINTS

S

$$\sqrt{a^2}$$

Simplify the expression.

2 POINTS

T

$$\sqrt{n^4}$$

Simplify the expression.

2 POINTS

U

$$\frac{1}{t^5}$$

Write the expression with negative exponents.

2 POINTS

V

$$\frac{2}{w^4}$$

Write the expression with negative exponents.

2 POINTS

W

$$\sqrt[3]{8a^3}$$

Simplify the expression.

2 POINTS

X

$$\sqrt[3]{27m^6}$$

Simplify the expression.

2 POINTS

Y

$$\sqrt{64b^2}$$

Simplify the expression.

2 POINTS

Z

Jayvon is building a patio that is a 12 foot wide square.

What the total area of the patio?

4 POINTS

α

Leah is designing a cube on a 3-D printer with edges that are 6 cm long.

What is the volume of the cube?

4 POINTS

β

The volume of air in a room is 64 in^3. This volume is equal in volume to a cube with a side of n.

What is the value of n?

4 POINTS

Δ

The volume of a sphere of radius r is given by $V = \frac{4}{3}\pi r^3$. A regulation basketball has a radius of 4.75 inches.

What is the volume to the nearest inch?

4 POINTS

λ

Logan frames a piece of his art in a square frame that has an area of 121 in^2.

What are its dimensions?

4 POINTS

π

Each of four trucks carries four pallets. Each pallet fits four drill presses.

How many drill presses are in the shipment?

4 POINTS

θ

KEY CARD

EXPONENTS & ROOTS

A	4^3	**I**	10^{-2}	**Q**	a^b	**Y**	$3m^2$
B	5^4	**J**	10^{-4}	**R**	w^{-3}	**Z**	$8b$
C	3^2	**K**	2	**S**	$4r^{-2}$	**α**	144 ft^2
D	2^5	**L**	-2	**T**	a	**β**	216 cm^2
E	2^{-3}	**M**	0	**U**	n^2	**π**	$11 \text{ in} \times 11 \text{ in}$
F	5^{-2}	**N**	a^3	**V**	t^{-5}	**Δ**	4 m
G	5	**O**	b^5	**W**	$2w^{-4}$	**θ**	64
H	9	**P**	ab^2	**X**	$2a$	**λ**	449 in^3