

Name

Directions: Show your work for credit. Use your notes and textbook for support

1. Find the value of 6^{-3}

Show your work

A -36

B -63

C $\frac{1}{216}$

D -216

2. Which of the following equations fits the data shown in the table?

Show your work

x	0	1	2
y	3	5	7

A $y = -2x$

B $y = 2x$

C $y = 2x + 3$

3. Which of the following equations has no solution?

Show your work

A $2(6 + x) = 14 + 2x$

B $5x - 10 = x + 20$

C $2(4 + x) = 8 + 2x$

D $10x + 5 = 3(5x + 7)$



4. Solve the equation below.

$$\frac{1}{3}(x + 6) = \frac{2}{3}(x - 9)$$

Show your work

5. When Neptune makes an orbit around the Sun, it travels about 2.82×10^{10} km. Neptune travels at a rate of about 470,000 km/day. How many days does one orbit of Neptune take? Write your answer in scientific notation.

Show your work
