Name: _________________________________

a) \( y + 12 \) when \( y = 29 \)

b) \( 47 - x \) when \( x = 38 \)

c) \( 0.8a \) when \( a = 75 \)

d) \( 12.5 + m \) when \( m = 7.6 \)

e) \( r(4.6) \) when \( r = 8.1 \)

f) \( 6.25 \div g \) when \( g = 2.5 \)

g) \( \frac{x}{0.9} \) when \( x = 54 \)

h) \( \frac{62}{d} \) when \( d = 3.1 \)

i) \( \frac{4}{7} \cdot t \) when \( t = \frac{7}{8} \)

j) \( r(8.3) \) when \( r = 10.2 \)

k) \( w + \frac{2}{5} \) when \( w = \frac{1}{2} \)

l) \( \frac{n}{2.4} \) when \( n = 12 \)
Write the power in words and as a product.

m) $8^7$

n) $(0.1)^4$

o) $x^5$

Evaluate the power

p) $9^2$

q) $17^6$

r) $(0.4)^3$

s) $x^2$ when $x = \frac{1}{5}$

t) $m^4$ when $m = 0.6$

u) $2y^3$ when $y = 4$
Word Problems

1. **Side Table**: A side table has interior storage space in the shape of a cube. What is the interior storage space if the interior (inside) length is 12 inches?

2. **Playing Cards**: There are 52 cards in a standard deck of playing cards. You are combining decks of cards so that you can play a game with a large number of people. The expression $52d$ represents the number of cards in $d$ decks. If you combine 4 decks of cards, how many cards will you have altogether?

3. **Sales Tax**: An item costs $c$ dollars and 6% sales is charged. The total cost including sales tax is given by the expression $1.06c$. You are buying an item that costs $75. What is the cost of the item including the sales tax?

4. **Flower Arranging**: You are creating a floral arrangement for a friend. The total cost (in dollars) for one vase and $f$ flowers is given by the expression $8 + 2.5f$. How much will it cost to make an arrangement with 8 flowers?