

Exponential Functions and Growth



Use the matching sheet ID when checking answers.

Use the material to work through each task. Show the requested response.

1. Find y at $x = 4$.

Answer: 48

2. What factor multiplies y at each step?

Answer: 2

3. What does the coefficient 3 represent?

Answer: the initial value at $x = 0$

4. Solve $2^x = 32$.

Answer: $x = 5$

5. For $y = 16 \times (1/2)^x$, find y when $x = 3$.

Answer: 2

6. How does this doubling table differ from a linear table?

Look for:

- Compares multiplicative and additive patterns.

One possible response: It has a constant multiplicative factor, not a constant additive difference.

Open responses use criteria and an illustrative response. Other well-supported responses can be acceptable.