

Exponential Functions Bell Work

Write the domain, range, asymptote and intercept of each function.

1. $f(x) = 2^{-x}$

2. $f(x) = 0.2^{x+2}$

3. $f(x) = -(0.25)^x$

4. $f(x) = 2^x + 4$

5. $f(x) = 5^{-x} + 2$

6. $f(x) = \left(\frac{1}{6}\right)^x$

Exponential Functions Bell Work

Answers

Write the domain, range, asymptote and intercept of each function.

1. $f(x) = 2^{-x}$

Domain: $(-\infty, +\infty)$

Range: $(0, +\infty)$

Asymptote: $y = 0$

Intercept: $(0, 1)$

2. $f(x) = 0.2^{x+2}$

Domain: $(-\infty, +\infty)$

Range: $(0, +\infty)$

Asymptote: $y = 0$

Intercept: $(0, 0.04)$

3. $f(x) = -(0.25)^x$

Domain: $(-\infty, +\infty)$

Range: $(-\infty, 0)$

Asymptote: $y = 0$

Intercept: $(0, -1)$

4. $f(x) = 2^x + 4$

Domain: $(-\infty, +\infty)$

Range: $(4, +\infty)$

Asymptote: $y = 4$

Intercept: $(0, 5)$

5. $f(x) = 5^{-x} + 2$

Domain: $(-\infty, +\infty)$

Range: $(2, +\infty)$

Asymptote: $y = 2$

Intercept: $(0, 3)$

6. $f(x) = \left(\frac{1}{6}\right)^x$

Domain: $(-\infty, +\infty)$

Range: $(0, +\infty)$

Asymptote: $y = 0$

Intercept: $(0, 1)$