

Review for Test 6

List the information of the given functions.

1. $y = 3 \sin \frac{1}{2}x - 3$

Domain: $(-\infty, \infty)$ Range: $[-6, 0]$

Amplitude: 3 Period: 2π

2. $y = -\cos(x + \pi) + 3$

Domain: $(-\infty, \infty)$ Range: $[2, 4]$

Amplitude: 1 Period: 2π

3. $y = 2^{x+1} + 3$

Domain: $(-\infty, \infty)$ Range: $(3, \infty)$

Asymptote: $y = 3$ y-intercept: $(0, 5)$

4. $y = \left(\frac{1}{2}\right)^{x-1} + 4$

Domain: $(-\infty, \infty)$ Range: $(4, \infty)$

Asymptote: $y = 4$ y-intercept: $(0, 6)$

5. $y = 2 \log_3 x - 2$

Domain: $(0, \infty)$ Range: $(-\infty, \infty)$

Asymptote: $X = 0$ x-intercept: $(3, 0)$

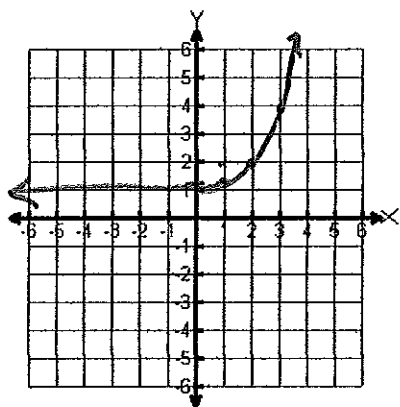
6. $y = -\log(x + 4)$

Domain: $(-4, \infty)$ Range: $(-\infty, \infty)$

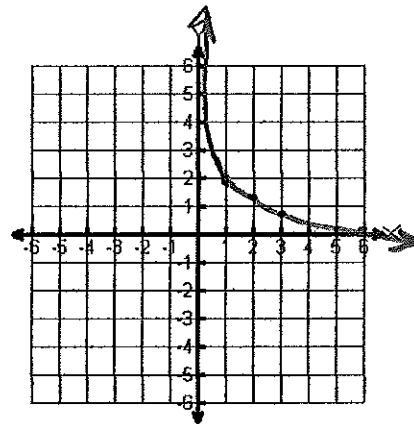
Asymptote: $X = -4$ x-intercept: $(-3, 0)$

Draw the graph of the given functions.

7. $y = 3^{x-2} + 1$

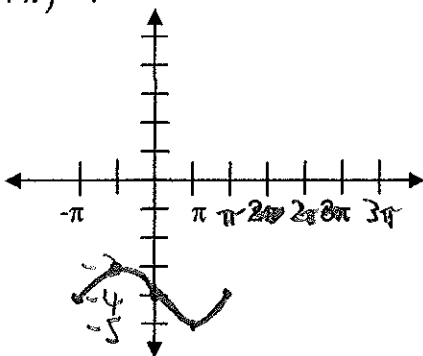


8. $y = -\ln(x) + 2$



9. $y = \sin(x + \pi) - 4$

R: $[-5, -3]$



10. $y = -2 \cos x + 3$

R: $[1, 5]$

