Secondary 3 Name_____

Pre-Test Review

Date_____ Period____

Solve each equation.

1) $a^7a^{-2}a^3$

2) $\frac{b^{-8}}{b^{-3}}$

3) $4^{p-1} = 4^2$

4) $9^{a-3} = 81$

5) $16 + 6b = 5(5b - 8) - 5b$

6) $7b + 18 = -8(6 - 5b)$

Write the following exponential equations in Logarithmic form.

7) $18^n = 46$

8) $4^b = 12$

Find the inverse of each function. SOLVE and SWITCH

9) $g(x) = 5 - \frac{5}{3}x$

10) $g(x) = \frac{15 - x}{5}$

11) $f(x) = 9x + 5$

12) $h(x) = 2x - 3$

13) $y = \log_4 x$

14) $y = \log_3 x$

Evaluate each function.

15) $g(n) = -3n + 3$; Find $g(n - 1)$

16) $f(x) = 3x + 5$; Find $f(-4x)$

17) $f(x) = 4^x$; Find $f(2)$

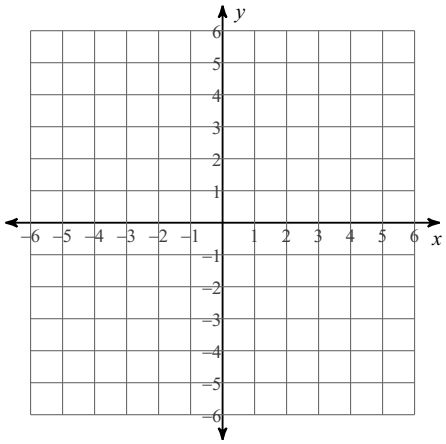
18) $g(x) = 2x + 5$; Find $g(6)$

19) $p(t) = 3t + 5$; Find $p(10)$

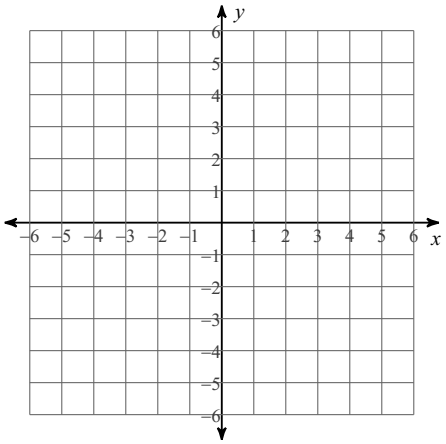
20) $h(x) = 3^x$; Find $h(-3)$

Find the inverse of each function. Then graph the function and its inverse.

21) $f(x) = 4x + 2$



22) $f(x) = x - 3$



State if the given functions are inverses. Show Proof!!

23) $g(x) = x + 1$
$f(x) = x - 1$

24) $f(x) = \dfrac{-3x + 9}{2}$
$h(x) = \dfrac{9 - 2x}{3}$

Secondary 3 Name_____

Pre-Test Review

Date_____ Period____

Solve each equation.

1) $a^7a^{-2}a^3$

$\{a^8\}$

2) $\frac{b^{-8}}{b^{-3}}$

$\{b^{-5}\}$

3) $4^{p-1} = 4^2$

$\{3\}$

4) $9^{a-3} = 81$

$\{5\}$

5) $16 + 6b = 5(5b - 8) - 5b$

$\{4\}$

6) $7b + 18 = -8(6 - 5b)$

$\{2\}$

Write the following exponential equations in Logarithmic form.

7) $18^n = 46$

$\log_{18} 46 = n$

8) $4^b = 12$

$\log_4 12 = b$

Find the inverse of each function. SOLVE and SWITCH

9) $g(x) = 5 - \frac{5}{3}x$

$g^{-1}(x) = -\frac{3}{5}x + 3$

10) $g(x) = \frac{15 - x}{5}$

$g^{-1}(x) = -5x + 15$

11) $f(x) = 9x + 5$

$f^{-1}(x) = \frac{x - 5}{9}$

12) $h(x) = 2x - 3$

$h^{-1}(x) = \frac{1}{2}x + \frac{3}{2}$

13) $y = \log_4 x$

$y = 4^x$

14) $y = \log_3 x$

$y = 3^x$

Evaluate each function.

15) $g(n) = -3n + 3$; Find $g(n - 1)$

$-3n + 6$

16) $f(x) = 3x + 5$; Find $f(-4x)$

$-12x + 5$

17) $f(x) = 4^x$; Find $f(2)$

16

18) $g(x) = 2x + 5$; Find $g(6)$

17

19) $p(t) = 3t + 5$; Find $p(10)$

35

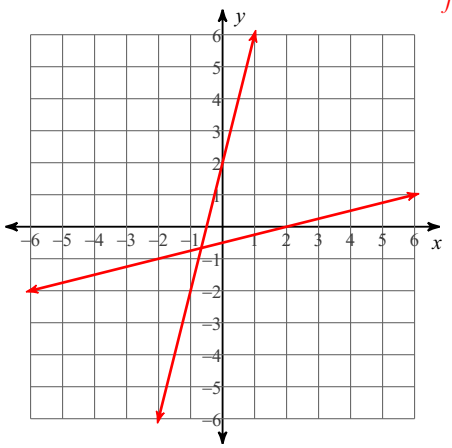
20) $h(x) = 3^x$; Find $h(-3)$

$\frac{1}{27}$

Find the inverse of each function. Then graph the function and its inverse.

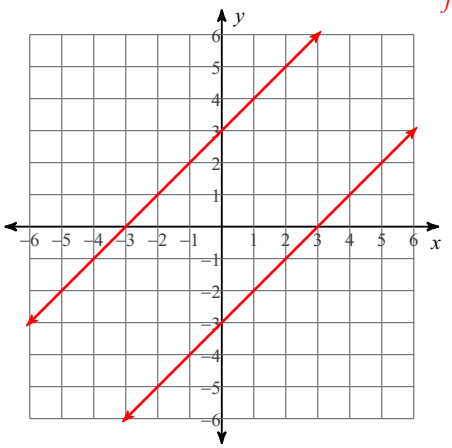
21) $f(x) = 4x + 2$

$f^{-1}(x) = \frac{1}{4}x - \frac{1}{2}$



22) $f(x) = x - 3$

$f^{-1}(x) = x + 3$



State if the given functions are inverses. Show Proof!!

23) $g(x) = x + 1$
$f(x) = x - 1$

Yes

24) $f(x) = \frac{-3x + 9}{2}$
$h(x) = \frac{9 - 2x}{3}$

Yes