

Assignment: do in your notebook on lined paper.

Date _____ Block _____

Simplify.

1) $\frac{-2}{-8i}$

2) $\frac{-3}{-3i}$

3) $\frac{-5}{-i}$

4) $\frac{2}{2i}$

5) $\frac{5}{\sqrt{10} - 5}$

6) $\frac{9\sqrt{3}}{3 - \sqrt{2}}$

7) $(-3 + 4i)(-6 + 5i)$

8) $(2i)(8i) + (i)(5 - 5i)$

9) $(4 - 5i)(-4 + 6i)$

10) $(-4 - 3i) - (3 + 7i)$

11) $-8(1 + 7i) + (3i)(-8 - 8i)$

12) $(-1 + 7i)(6 - 3i)$

13) $(5i)(3i)(3 + 2i)$

14) $-5(2 - 8i) - 6 \cdot (-2i)$

State if the given functions are inverses.

15) $g(x) = \frac{-12 + 5x}{3}$
 $f(x) = \frac{3x + 12}{5}$

16) $f(x) = -x + 5$
 $h(x) = 4 + \frac{7}{5}x$

17) $f(x) = -1 - \frac{2}{3}x$
 $g(x) = 6x + 2$

18) $f(x) = -x - 3$
 $g(x) = 2 + \frac{6}{5}x$

Find the inverse of each function.

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

20) $f(x) = \frac{5x + 20}{6}$

21) $f(n) = \frac{\sqrt[5]{16n}}{2}$

22) $f(x) = x^5 + 1$

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

23) $f(n) = \frac{4}{n + 2} - 2$

24) $f(x) = \sqrt[5]{x - 2}$

