

Math 165/166
Lab 2, Jan 15
Chapter 1

Name:
Box Number:

1. Perform the indicated operations and simplify the expression. No negative exponents.

(a) $\frac{x+2}{1+\frac{2}{x}}$

(b) $\frac{\frac{1}{x} - \frac{1}{y}}{x-y}$

(c) $\left(\frac{a^{-3}b^7}{b^2a^{-8}}\right)^2$

$$(d) \frac{a^{-2} - b^{-2}}{a^{-1} - b^{-1}}$$

$$(e) (\sqrt{3} - \sqrt{5})^2$$

$$(f) \sqrt{98} + 5\sqrt{32} + 3\sqrt{8}$$

Answers:

$$1. (a) x \quad (b) \frac{-1}{xy} \quad (c) a^{10}b^{10} \quad (d) \frac{b+a}{ab} \quad (e) 8 - 2\sqrt{15} \quad (f) 33\sqrt{2}$$