## Math 01, Homework 3 on Sections 2.3-2.8, 3.1-3.2

Hand in by Wed, Mar 2 at the start of class.

Write all your working out and answers on a separate sheet. It is very important that you show clearly any work you had to do to get the answer. These first ten questions are 2 points each and the answers are on page 2.
(1) Evaluate:
(a) $-93+(-28)$,
(b) $-43+27$
(2) Compute:
(a) $-100-20$,
(b) $56-(-19)$
(3) Find: $\quad-11(-9)$
(4) Calculate: $(-117) \div 9$
(5) Calculate: $(-187) \div(-11)$
(6) Divide:
(a) $0 \div(-6)$,
(b) $(-6) \div 0$,
(c) $0 \div 0$
(7) Compute:
(a) $(-4)^{4}$,
(b) $-(-2)^{6}$,
(c) $99^{0}$
(8) Evaluate:
(a) $\sqrt{16}$,
(b) $-\sqrt{16}$,
(c) $\sqrt{-16}$
(9) Use a rectangle or circle to represent $5 / 6$
(10) Use rectangles or circles to represent $7 / 6$

These next eight questions are 2 points each. Show clearly all your working out and reasoning.
(11) Evaluate:
(a) $-48+(-77)$,
(b) $-27+43$
(12) Compute:
(a) $-99-98$,
(b) $0-(-100)$
(13) Find: $10(-234)$
(14) Calculate: $(-169) \div(-13)$
(15) Compute:
(a) $(-1)^{15}$,
(b) $-(-2)^{3}$,
(c) $1^{0}$
(16) Evaluate:
(a) $\sqrt{36}$,
(b) $-\sqrt{36}$,
(c) $\sqrt{-36}$
(17) Use a rectangle or circle to represent $3 / 5$
(18) Use rectangles or circles to represent $12 / 5$

## Answers to questions (1)-(10):

(1)
(a) -121 ,
(b) -16
(2)
(a) -120, (b) 75
(3) 99
(4) -13
(5) 17
(6)
(a) 0 ,
(b) undefined,
(c) undefined
(a) 256 ,
(b) -64 ,
(c) 1
(8)
(a) 4,
(b) -4 ,
(c) not a signed number (so undefined for now)
(9) A rectangle representing 5/6

(10) Rectangles representing $7 / 6$


