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

Write all your working out and answers on your own notepaper - no need to write the questions. Please use lots of space.

It is very important that you show clearly any work you had to do to get your answers. Just writing the answer down with no work shown is not enough. All 18 questions are worth 2 points each.

Do these first 10 questions and *check that your answers match the solutions on page 2*. If you don't get the same answers then look at your notes or the book or ask me. Only do the last eight questions when you are sure you understand the first ten.

(1) Evaluate: **(a)** $-93 + (-28)$, **(b)** $-43 + 27$

(2) Compute: **(a)** $-100 - 20$, **(b)** $56 - (-19)$

(3) Find: $-11(-9)$

(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 $7/6$

Eight more questions[1] . 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

[1]Questions continue on page 2

(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

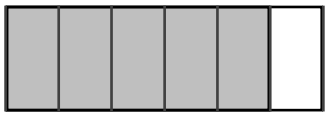
(5) 17

(6) **(a)** 0, **(b)** undefined, **(c)** undefined

(7) **(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 $7/6$