Math 01, Homework 2 on Sections 1.7 - 1.9, 2.1 - 2.4

Write all your working out and answers on a separate sheet. These first ten questions are 2 points each and **their solutions are on page 2**. Check that you get the same answers. If you don't, 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.

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.

(1) Evaluate: $4 + 16 \div 4$

(2) Find: $2 \cdot 6 + 2(\sqrt{36} - 1)$

(3) Find: $[18 \div (9 \div 3)]^2$

(4) Calculate: $16^2 - \sqrt{16} - 8 + 4$

(5) Find the average of this list of numbers: $2, 3, 5, 6, 9, 11$

(6) A rectangle has width 4 inches and length 5 inches. Calculate (giving the correct units): **(a)** its area, **(b)** its perimeter

(7) Decide if these statements are True or False: **(a)** $6 > 1$, **(b)** $-4 < 2$, **(c)** $5 > -5$

(8) Evaluate: **(a)** $10 + (-7)$, **(b)** $-16 + 11$

(9) Compute: **(a)** $-6 + (-5)$, **(b)** $(-4) + (-5) + (-6)$

(10) Compute: **(a)** $10 - (-7)$, **(b)** $-17 - (-13)$

These next eight[1] questions are 2 points each. Show clearly all your working out and reasoning.

(11) Evaluate: $9 \cdot 6 \div 3 \cdot 3$

(12) Find: $6 + 5 \cdot 3$

(13) Compute: $20 - \sqrt{100 + 25 - 4}$

(14) Find: $10 - 9 + 8 \cdot 7 \div 2^3$

(15) A rectangle has width 7 feet and length 9 feet. Calculate (giving the correct units): **(a)** its area, **(b)** its perimeter

[1] Three more questions on the next page!

(16) Evaluate: **(a)** $14 + (-9)$, **(b)** $-10 + 6$

(17) Compute: **(a)** $-5 + (-7)$, **(b)** $(-133) + (-92)$

(18) Compute: **(a)** $9 - (-8)$, **(b)** $-19 - (-19)$

Answers to questions (1)-(10):

(1) 8

(2) 22

(3) 36

(4) 248

(5) 6

(6) **(a)** area is 20 square inches, **(b)** perimeter is 18 inches

(7) **(a)** True, **(b)** True, **(c)** True

(8) **(a)** 3, **(b)** -5

(9) **(a)** -11, **(b)** -15

(10) **(a)** 17, **(b)** -4