

WEEKEND WORKOUT #2:
EXPRESSIONS/EQUATIONS/INEQUALITIES (15 pts)**15****Part I - Multiple Choice (1 point each)****Show all work where necessary. Place final answers in the answer box.**

(1) Which expression is equivalent to

$$7a - 8 - 10a + 4$$

- A. $-7a$
B. $29a$
C. $-3a - 4$
D. $17a - 12$

(2) Which expression is equivalent to

$$2(x + 7) - 18x + \frac{4}{5}$$

- A. $20x + \frac{74}{5}$
B. $20x + \frac{139}{5}$
C. $-16x + \frac{74}{5}$
D. $-16x + \frac{139}{5}$

(3) Cynthia goes miniature golfing. She pays \$7.50 for an admission ticket and \$6.25 for each round she golfs. The total amount Cynthia pays for admission and the number of rounds she golfs is \$26.25. Which equation can be used to determine the number of rounds, x , that Cynthia golfs?

- A. $6.25x + 7.50 = 26.25$
B. $6.25x - 7.50 = 26.25$
C. $7.50x + 6.25 = 26.25$
D. $7.50x - 6.25 = 26.25$

(4) A coach of a baseball team orders hats for the players on his team. Each hat costs \$9.95. The shipping charge for the entire order is \$5.00. There is no tax on the order. The total cost of the coach's order is less than \$125.00. Which inequality can be used to determine the greatest number of hats, h , the coach orders?

- A. $5h + 9.95 > 125$
B. $5h + 9.95 < 125$
C. $9.95h + 5 > 125$
D. $9.95h + 5 < 125$

(5) Which expression is equivalent to $(-18) - 64n$?

- A. $-2(9 - 32n)$
B. $2(9 - 32n)$
C. $-2(9 + 32n)$
D. $2(9 + 32n)$

Part II - Constructed Response (2 points each)

Show all work! A correct answer without appropriate work will receive NO credit. Place final answers in the answer box.

(6) Todd orders pictures from a photographer. Each picture costs \$7.50. A one-time shipping fee of \$3.25 is added to the cost of the order. The total cost of Todd's order before tax is \$85.75. How many pictures did Todd order?

(7) Josh has a rewards card for a movie theater.

- He receives 15 points for becoming a rewards card holder.
- He earns 3.5 points for each visit to the movie theater.
- He needs at least 55 points to earn a free movie ticket.

Write and solve an inequality Josh can use to determine x , the minimum number of visits he needs to earn his first free movie ticket.

(8) Jim needs to rent a car. A rental company charges \$21 per day to rent a car and \$0.10 for every mile driven.

(a) If Jim travels 250 miles and has \$115 to spend, write an inequality that can be used to determine d , the maximum number of days that Jim can rent a car.

(b) Jim believes the maximum whole number of days he can rent the car is 5. Is he correct? Why or why not?

(9) Mario is setting up a new tent during a camping trip. The tent came with 7 feet of rope. The instructions are to use 34.5 inches of the rope to tie a tarp on top of the tent. Then, the remaining rope should be cut into $8\frac{1}{4}$ -inch sections to tie the tent to stakes in the ground. Mario will use all of the rope as instructed. Write and solve an equation to determine the number of $8\frac{1}{4}$ -inch sections of rope Mario can cut from the rope.



(10) Susan buys the items listed below at a grocery store.

- 2 packages of chicken priced at \$12.36 per package
- 1 gallon of milk priced at \$3.49 per gallon
- $\frac{1}{2}$ pound of broccoli priced at \$1.98 per pound

There is no sales tax on the food she buys. Susan pays for the items and receives \$0.80 in change. What amount of money does Susan use to pay for the items?