Name _____ Date _____ Period _____

Chapter 2: Equation Review

CONCEPTUAL PHYSICS: UNIT 1

Directions: *Answer the following questions based on reading from Chapter 2 (pgs. 12-27) and/or from notes in class.*

EQUATIONS: $\Sigma F = 0$ $A^2 + B^2 = R^2$ or $R = \sqrt{A^2 + B^2}$

QUESTIONS:

1. What is the difference between force and net force?

2. What is the net force on a box that is being pulled to the right with a force of 75 N and pulled to the left with a force of 50 Newtons? (draw diagram and give numerical answer)

3. What two quantities are required to determine a vector quantitiy?

4. Give two examples of a vector quantity and two examples of a scalar quantity.

5. What does ∑F=0 mean?

6. What is the net force on an object at rest?

7. When you do pull-ups and you hang at rest, how much of your weight is supported by each arm?

8. Can an object be moving and still be in equilibrium? Defend your answer.

9. Distinguish between static equilibrium and dynamic equilibrium.

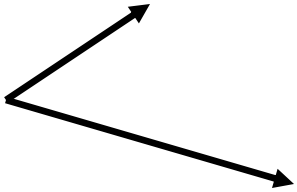
10. Determine the resultant vector for the following parallel vectors:

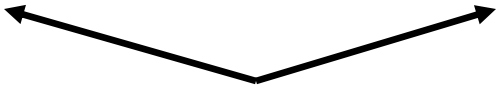
a. 

b. 

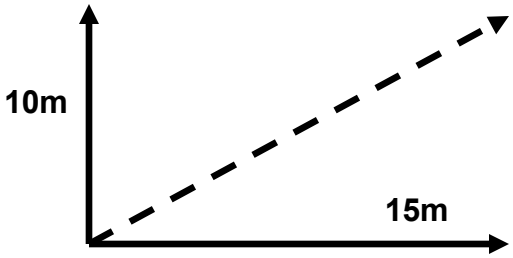
11. Determine the resultant vector for the following parallel vectors:

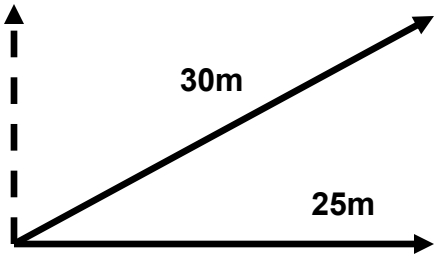
a. 

b. 

c. 

12. Using the Pythagorean Theorem to determine the missing vector quantity: (diagrams not to scale) show all work!

a. 

b. 

c.