Math 142 – Quiz #14a Name: _____

Lippman/Rasmussen – W11

8.4 – 8.5

1) Given it is 10:30am and the hour hand of a clock is 3 cm and the minute hand is 5 cm.

   a. Draw the clock

   b. Find the EXACT components of

   $\vec{h} =$

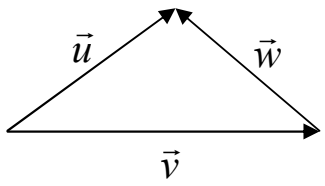
   $\vec{m} =$

2) Given the following vectors write **(T)True or (F) False** for the equations

   a. _____ $\overrightarrow{w} + \overrightarrow{v} = \overrightarrow{u}$

   b. _____ $\overrightarrow{u} + \overrightarrow{w} = \overrightarrow{v}$

   c. _____ $\overrightarrow{v} + \overrightarrow{u} = \overrightarrow{w}$



   d. _____ $\overrightarrow{v} - \overrightarrow{u} = \overrightarrow{w}$

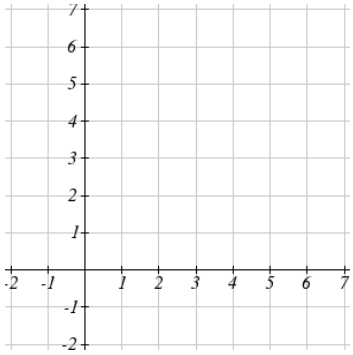
   e. _____ $\overrightarrow{u} - \overrightarrow{v} = \overrightarrow{w}$

3) Consider the parametric equation

$x(t) = 2t + 1$

$y(t) = 5 - 2t$

a. Solve the first equation for *t*



b. Substitute it into the second equation.

c. Write the equation for *y* as a function of *x*

d. Sketch a graph of the parametric equation

Math 142 – Quiz #14b Name :_____

Lippman/Rasmussen – W11

8.4 – 8.5

4) Given it is 7:30am and the hour hand of a clock is 3 cm and the minute hand is 5 cm.

c. Draw the clock

d. Find the EXACT components of

$\vec{h} =$

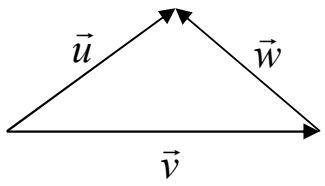
$\vec{m} =$

5) Given the following vectors write **(T)True or (F) False** for the equations

a. _____ $\overrightarrow{w} + \overrightarrow{v} = \overrightarrow{u}$

b. _____ $\overrightarrow{v} + \overrightarrow{u} = \overrightarrow{w}$

c. _____ $\overrightarrow{u} + \overrightarrow{w} = \overrightarrow{v}$

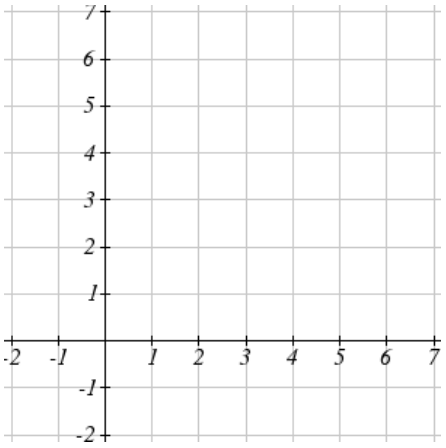


d. _____ $\overrightarrow{u} - \overrightarrow{v} = \overrightarrow{w}$

e. _____ $\overrightarrow{v} - \overrightarrow{u} = \overrightarrow{w}$

6) Consider the parametric equation $\begin{aligned} x(t) &= 3t - 1 \\ y(t) &= 4 - 3t \end{aligned}$

e. Solve the first equation for *t*



f. Substitute it into the second equation.

g. Write the equation for *y* as a function of *x*

h. Sketch a graph of the parametric equation