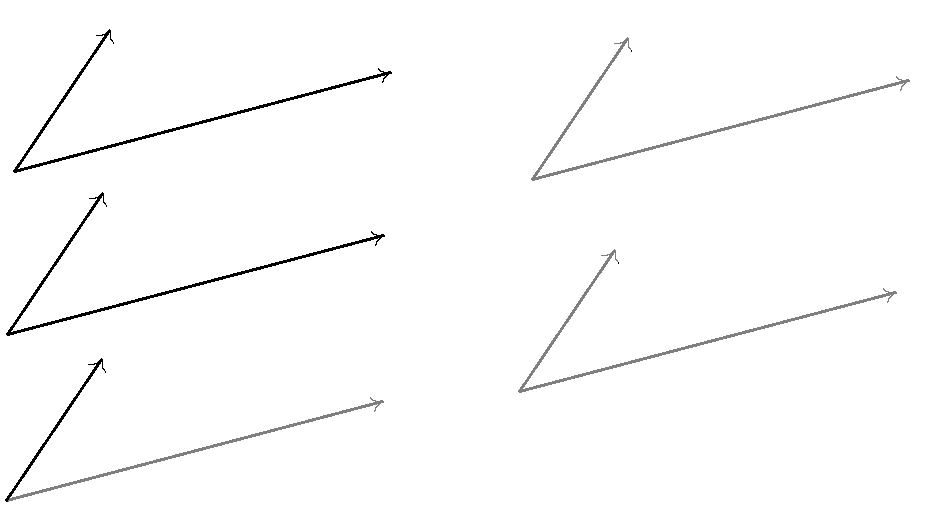
**Math 220  
6.2: Orthogonal Sets and 6.3: Orthogonal Projections  
Questions for flipped class**

**Graphically understand how to find an orthonormal basis in two dimensions**.

****

(6.3.1)



A math equation with numbers and symbols

Description automatically generated

(6.3.2)



A black text on a white background

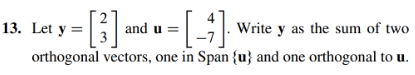
Description automatically generated

(6.3.3)

A black text on a white background

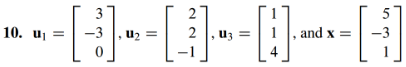
Description automatically generated

(6.2.7)



(6.2.8)

Show that is an orthogonal basis for . Then express  as a linear combination of the 

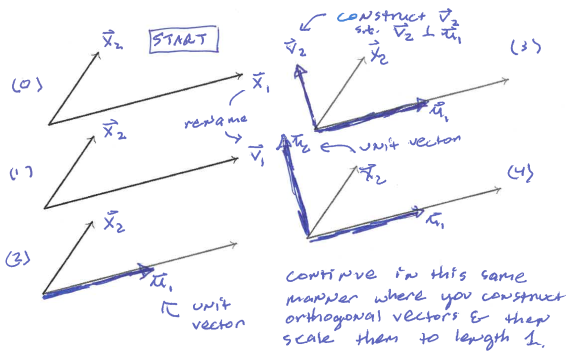


(6.2.9)

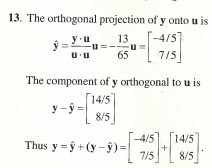


Hint: What is the definition of an orthogonal matrix? And then use Theorem \_\_\_.

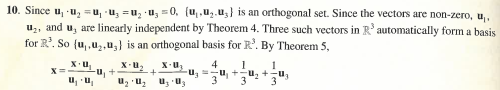
**Graphically understand how to find an orthonormal basis in two dimensions**.



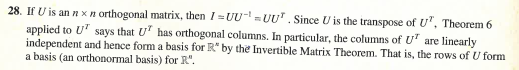
(6.2.7 solution)



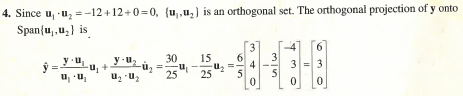
(6.2.8 solution)



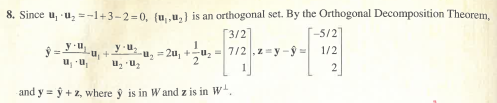
(6.2.9 solution)



(6.3.1 solution)



(6.3.2 solution)



(6.3.3 solution)

