

Ch 8. Review

Row # _____

Directions: Do your work on lined paper and staple to this sheet

Name _____

Period _____

1. \vec{u} has a magnitude of 11.4 m and amplitude of 19°
Find magnitude of vertical and horizontal components. 1. _____
2. Find magnitude of \vec{AB} $A(6,12)$ $B(-3,-4)$ 2. _____
3. Find magnitude of \vec{AB} $A(4,3,0)$ $B(1,5,-2)$ 3. _____
4. Write \vec{AB} as the sum of unit vectors
 $A(1,2,7)$ $B(-8,-7,5)$ 4. _____
5. Find an ordered triple that represents the vector from $A(5,-8,9)$ to $B(-2,2,2)$ 5. _____
6. $\vec{v} = (3,6)$ $\vec{w} = (-9,1)$ $\vec{r} = (1,-7,0)$ $\vec{s} = (4,11,-10)$
 A) Find $\vec{u} = v+4w$ B) Find $\vec{u} = -2v-w$ C) Find $\vec{u} = -r$
 D) Find $\vec{u} = r+4s$ E) Find $\vec{u} = 6s-3r$ 6. A) _____
B) _____
C) _____
D) _____
E) _____
7. Find the inner or dot product and state if perpendicular
A) $(8,2) \cdot (0,-6)$ B) $(3,-7,4) \cdot (-4,-2,1)$ 7. A) _____
B) _____
8. Find cross product $(-7,5,1) \times (-5,1,-8)$ 8. _____
9. Write in parametric form
A) $y = -3x + 4$ B) $5x - 3y = 1$ 9. A) _____
B) _____
10. Write in slope-intercept form
A) $x = 4t + 4$
 $y = 2t - 3$ 10. _____
11. A force m of 28 N pulls at an angle of 27° above due east. A force n of 32 N pulls at an angle of 50° above due west. Find magnitude and direction of resultant force. 11. _____

12. Tom weighs 96 lbs. Find the force that would propel him down the hill if the angle of the hill is 53° 12. _____
13. Sue kicks a soccer ball with an initial velocity of 102 ft/s. and angle of 67° .
A) After 2 sec, how far will the ball travel horizontally
B) After .8 sec, how far will the ball travel vertically 13. A) _____
B) _____