

Name _____

Date _____

Multiply a Vector by a Scalar - Matching WorksheetWrite the letter of the answer that matches the problem. Find a vector perpendicular to both vectors u and v .

_____ 1. $u = (6, 4, 2)$ and $v = (5, 5, 5)$. a. $(7, 66, -63)$

_____ 2. $u = (3, 1, 2)$ and $v = (3, 0, 9)$. b. $(5, -3, -2)$

_____ 3. $u = (6, 7, 8)$ and $v = (9, 0, 1)$. c. $(10, -20, 10)$

_____ 4. $u = (1, 1, 1)$ and $v = (4, 2, 7)$. d. $(9, -21, -3)$

Find the angle θ between the vectors u and v .

_____ 5. $u = (0, 2, 4)$ and $v = (3, 1, -5)$. e. 59.70

_____ 6. $u = (-2, 0, 6)$ and $v = (4, 5, 6)$. f. 87.94°

_____ 7. $u = (4, 10, 8)$ and $v = (9, -7, 5)$. g. 49.09°

_____ 8. $u = (6, 8, -9)$ and $v = (2, 3, 0)$. h. 132.87°

