Vectors

Study Development Worksheet

## Questions

1. Calculate:

Vectors

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1. Calculate the angle (in radians) between:
   1. and
   2. and
   3. and
   4. and
   5. and
   6. and
   7. Which of these pairs of vectors are orthogonal?
   8. Which are orthonormal?
2. Find the projection of:
   1. onto
   2. onto
   3. onto
3. Find
   1. The length of the vector
   2. A vector that is perpendicular to the vectors and .

Vectors

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## Answers

1. Calculate:
   1. =

Vectors

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* 1. 7
  2. 3

1. Calculate the angle (in radians) between:
   1. and = = 0
   2. =
   3. 0
   4. 0
   5. 0
   6. a, c, e, f
   7. e

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1. Find the projection of:
   1. = = =
   2. =
   3. =
2. Find
   1. A perpendicular vector is given by the cross product of the vectors.

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