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The diagram shows a solid figure *OABCDEFG* with a horizontal rectangular base *OABC* in which *OA* = 8 units and *AB* = 6 units. The rectangle *DEFG* lies in a horizontal plane and is such that *D* is 7 units vertically above *O* and *DE* is parallel to *OA*. The sides *DE* and *DG* have lengths 4 units and 2 units respectively. Unit vectors **i**, **j** and **k** are parallel to *OA*, *OC* and *OD* respectively. Use a scalar product to find angle *OBF*, giving your answer in the form $\cos^{-1}\left(\dfrac{a}{b}\right)$, where *a* and *b* are integers.

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