

Chapter 11

Vectors



Fig. 11-1: Free vector illustrated (I).

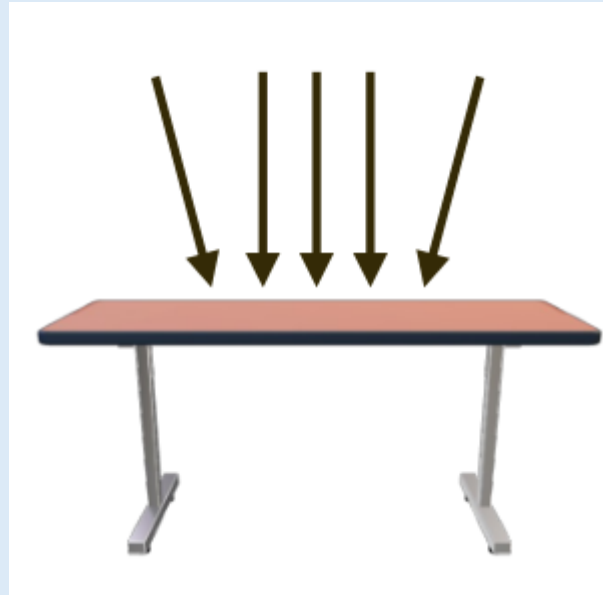


Fig. 11-2: Free vector illustrated (II).

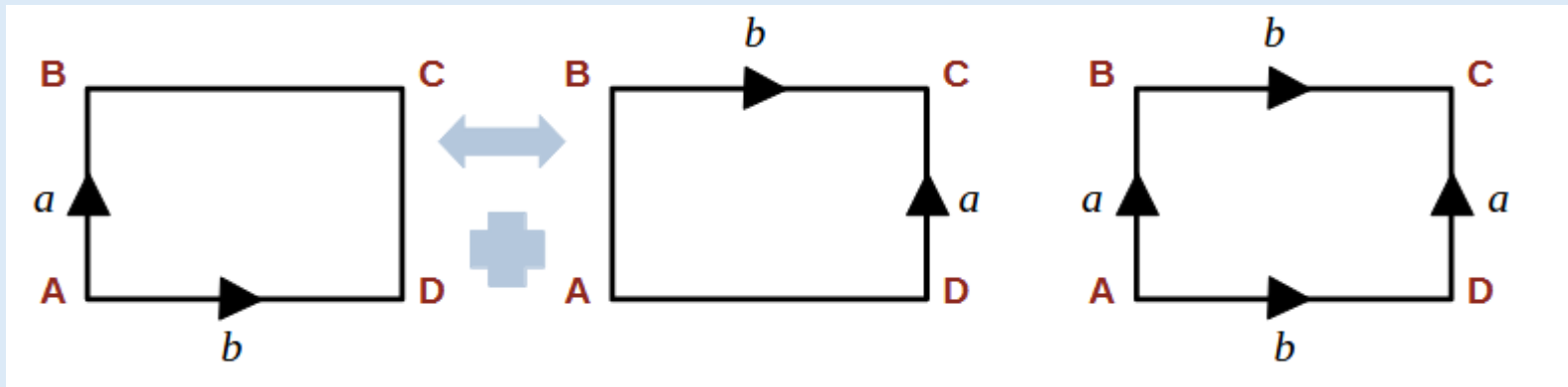


Fig. 11-3: Vector representation.

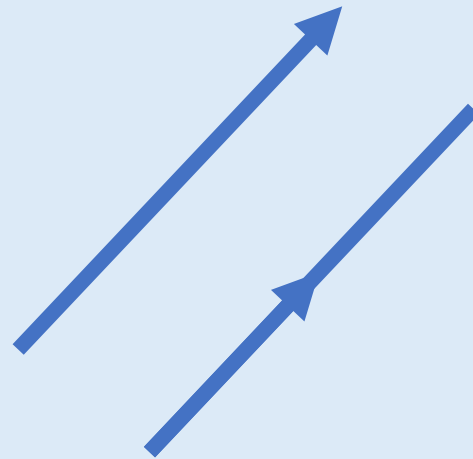


Fig. 11-4: Negative vector illustrated.

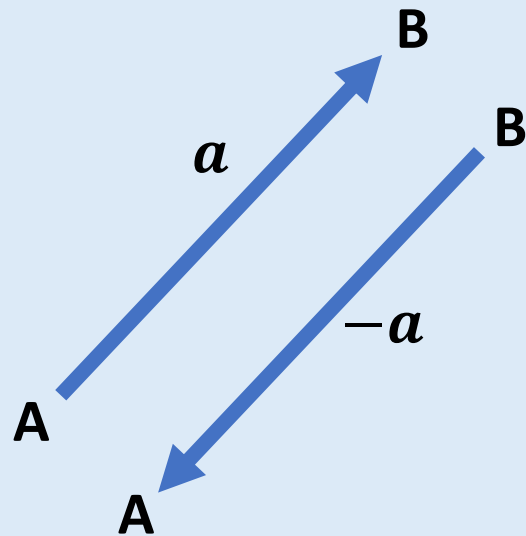


Fig. 11-5: Equality of vectors illustrated.

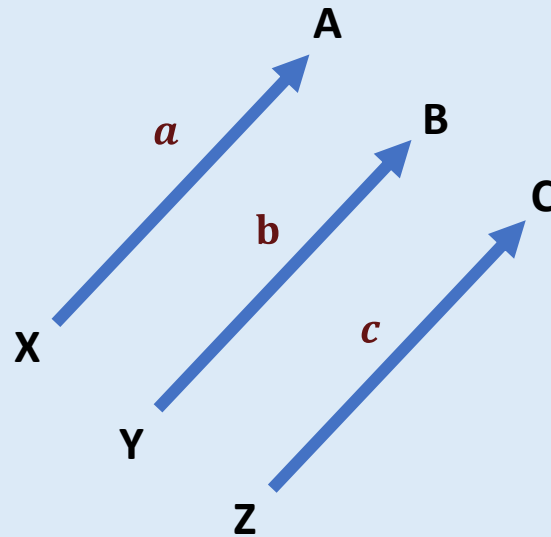


Fig. 11-6: Cartesian representation of vectors illustrated.

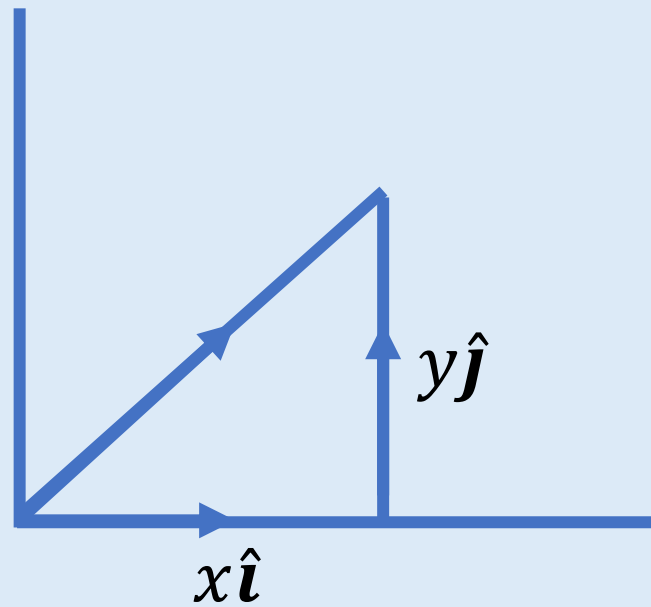


Fig. 11-7: Example 2.

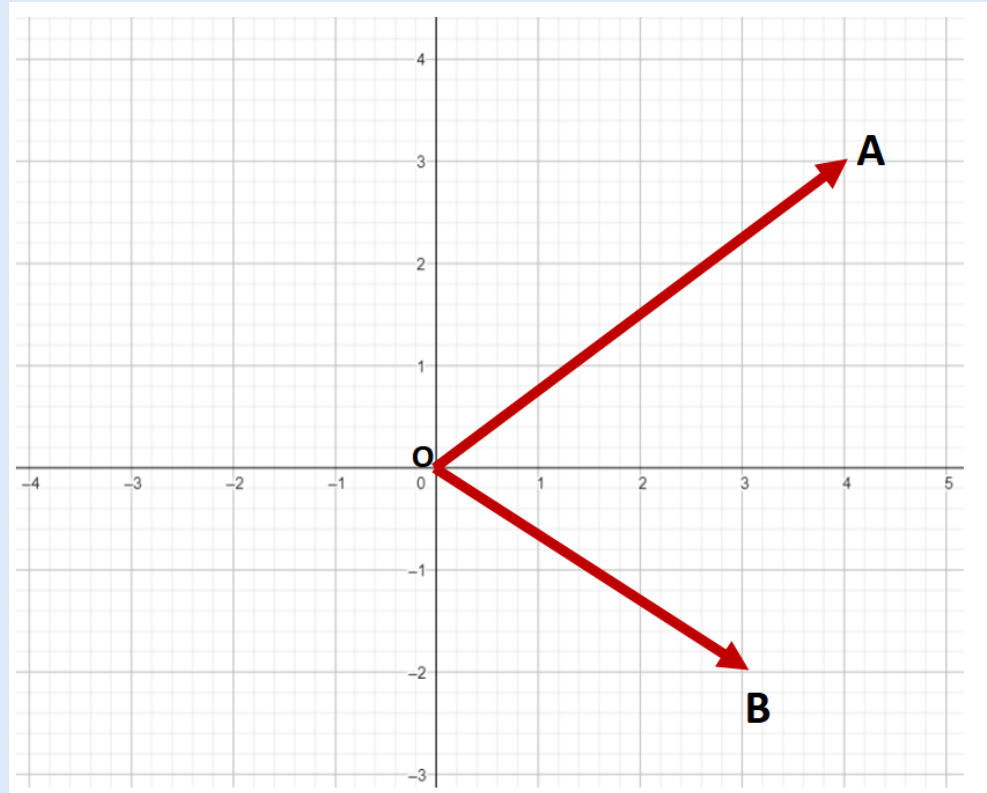


Fig. 11-8: Position vectors illustrated.

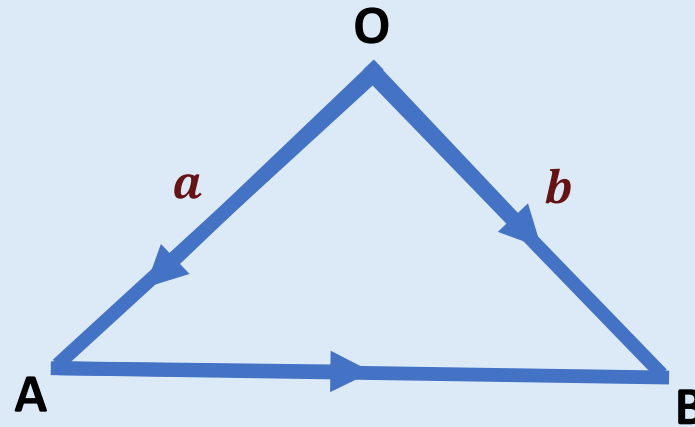


Fig. 11-9: Example 9.

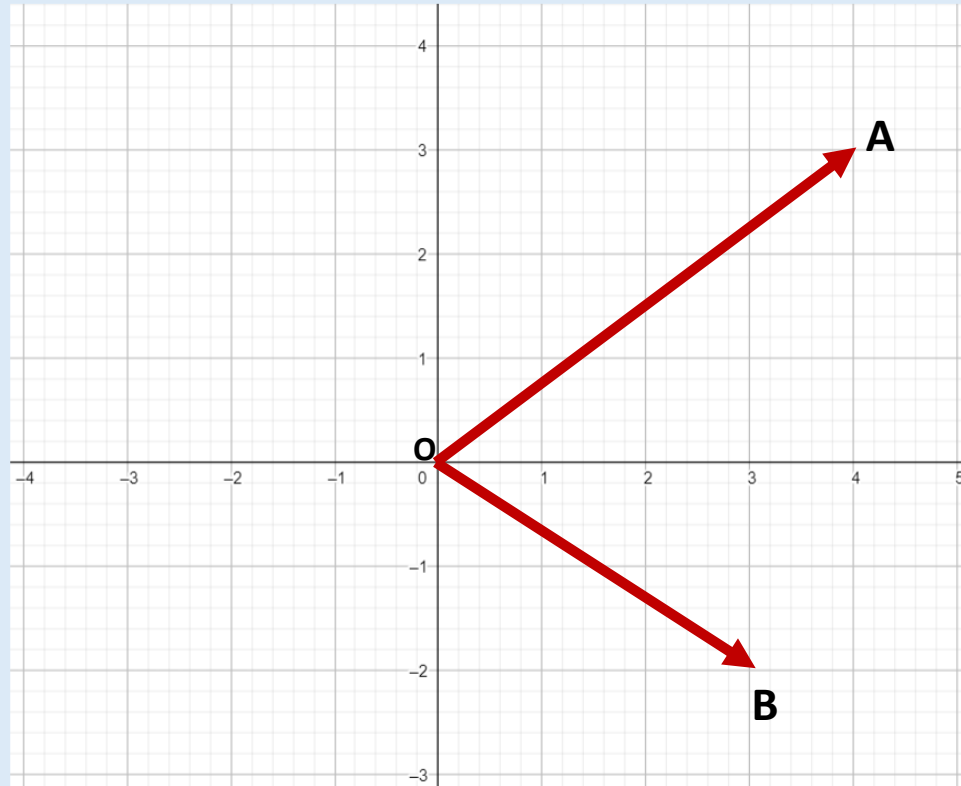


Fig. 11-10: Addition of vectors illustrated.

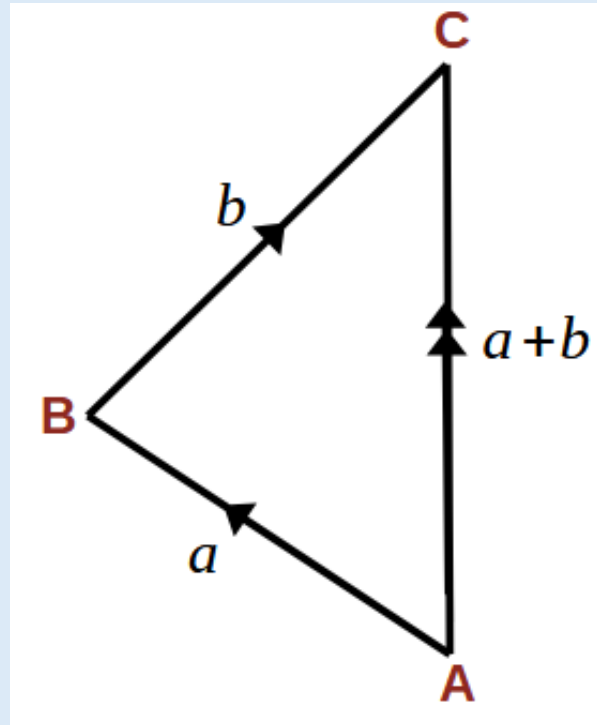


Fig. 11-11: Commutative law of vectors illustrated.

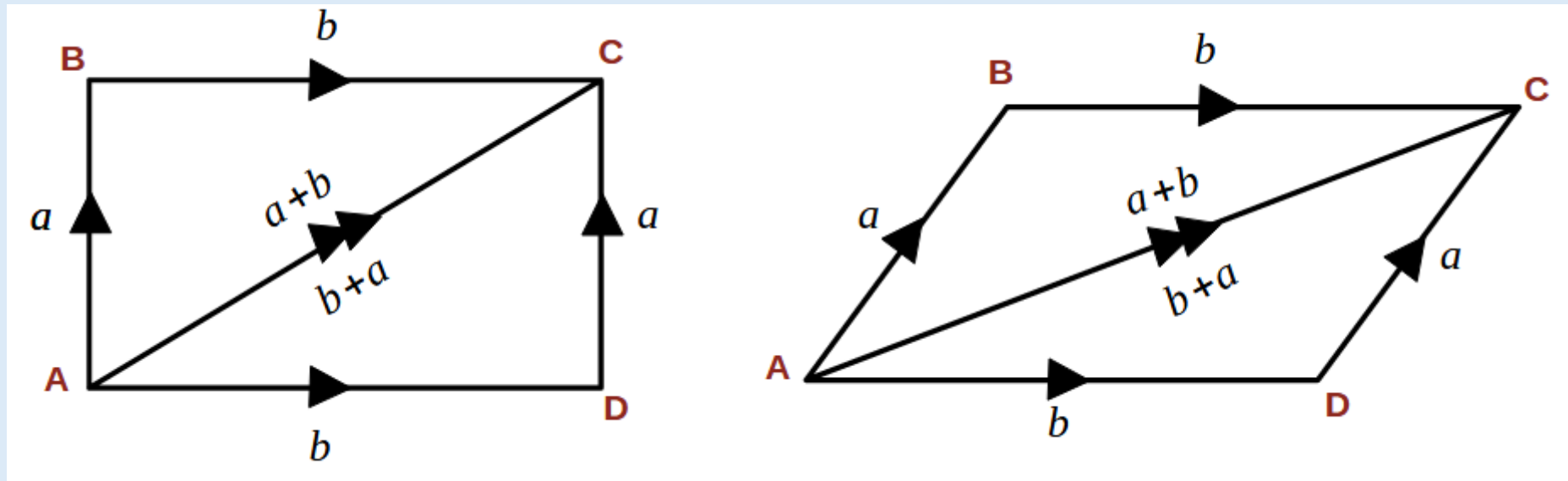


Fig. 11-12: Associative law of vectors illustrated.

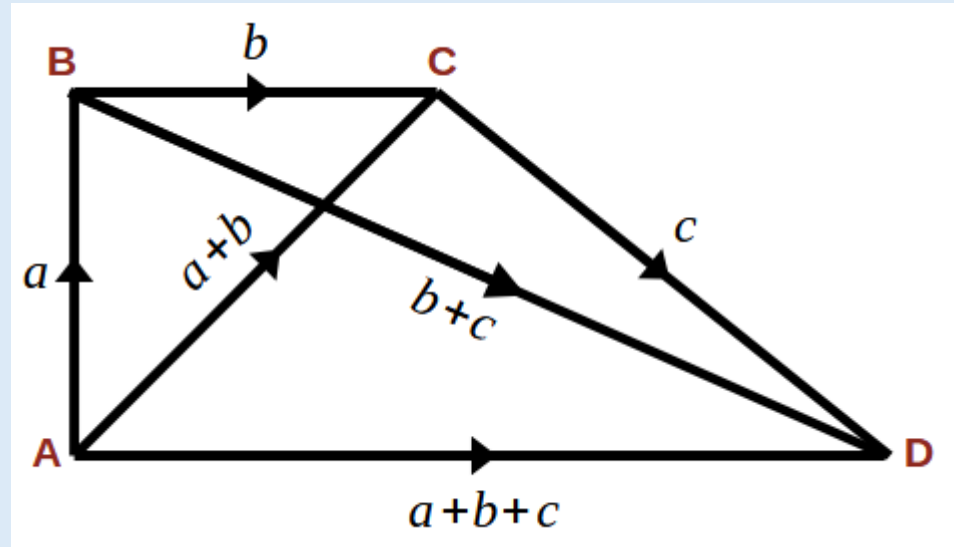


Fig. 11-13: Subtraction of vectors illustrated.

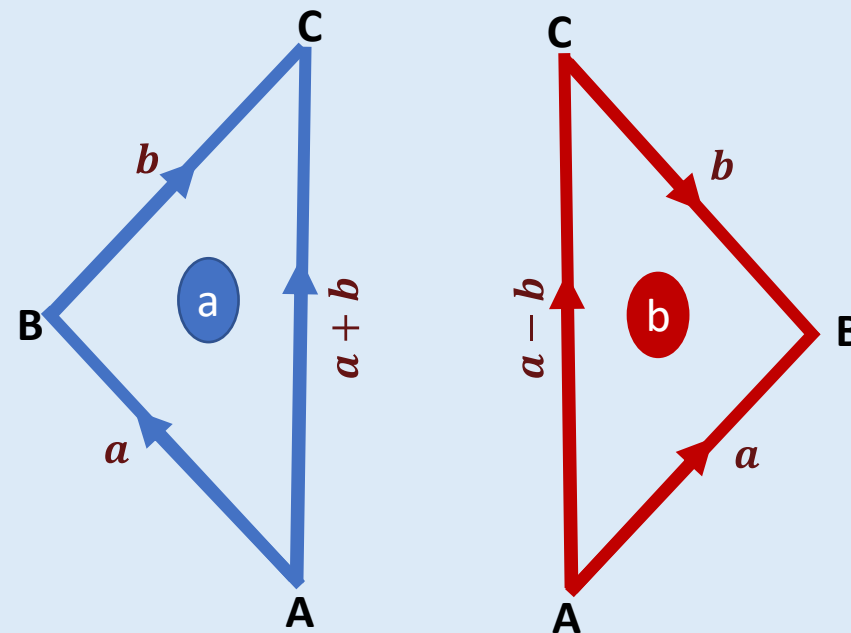


Fig. 11-14: Example 11.

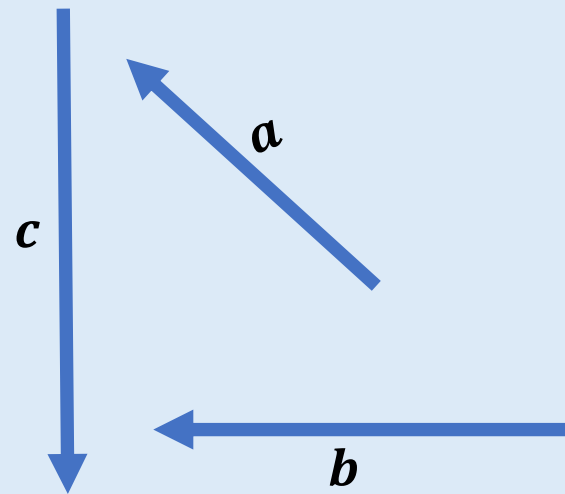


Fig. 11-15: Solution to Example 11.

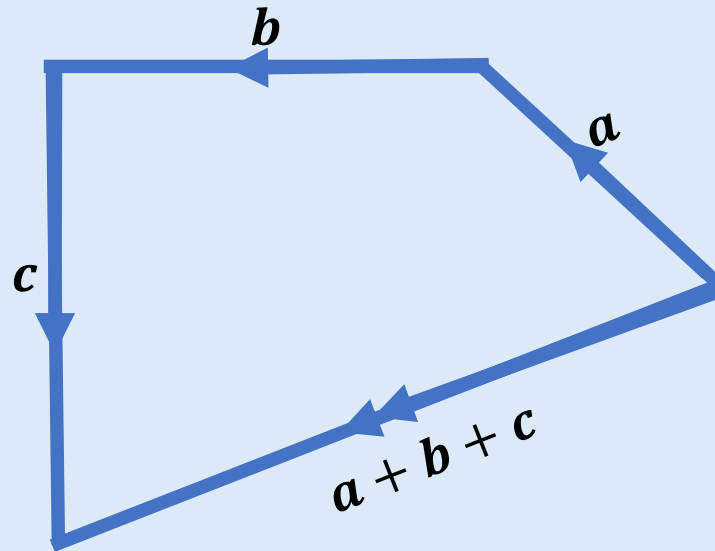


Fig. 11-16: Example 12.

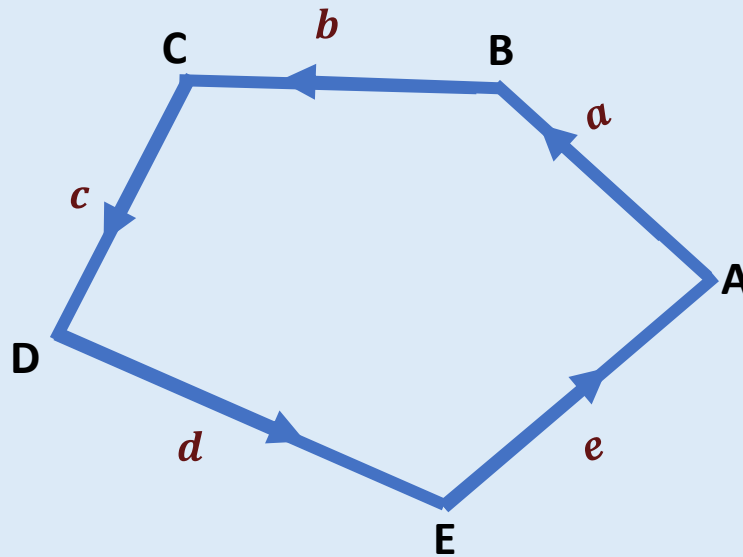


Fig. 11-17: Multiplication of a vector by a scalar illustrated.

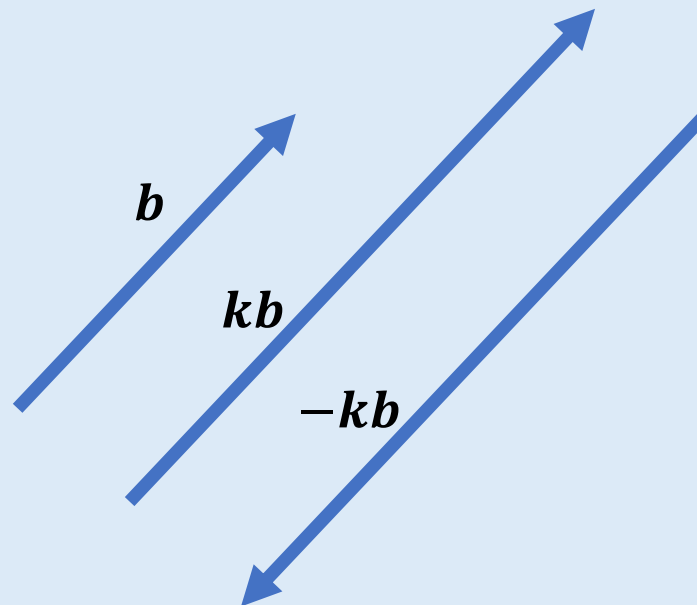


Fig. 11-18: Dot product of vectors illustrated.

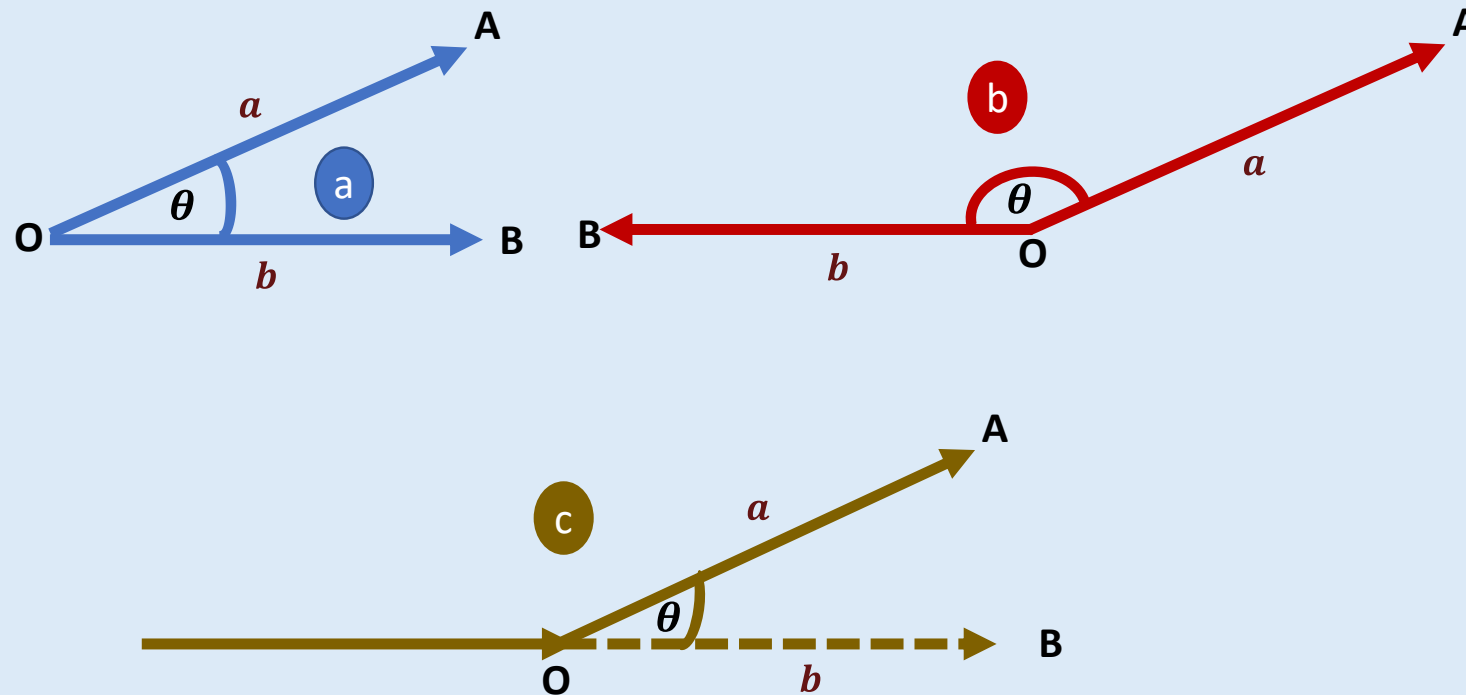


Fig. 11-19: Example 19.

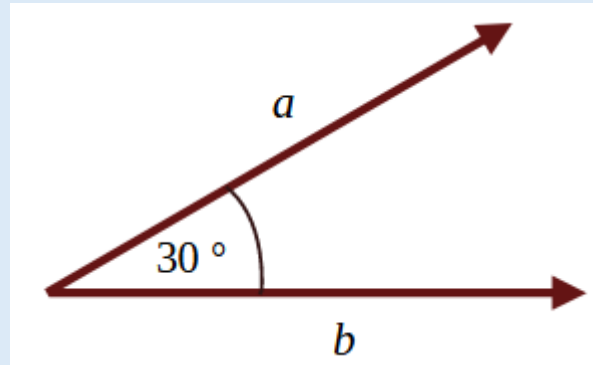


Fig. 11-20: Example 20.

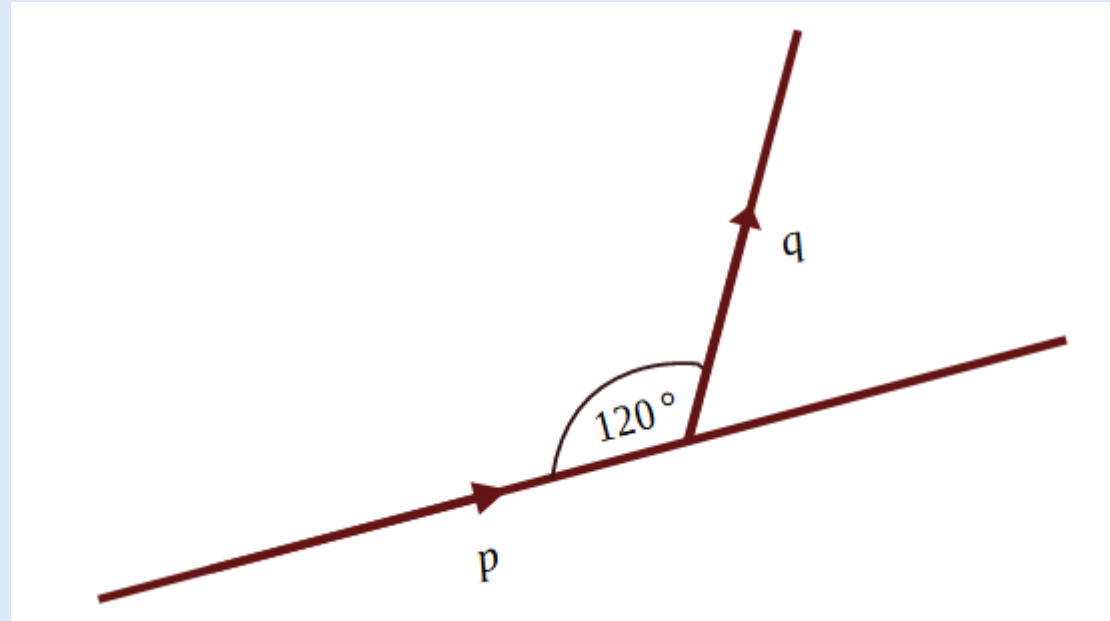


Fig. 11-21: Solution to Example 20.

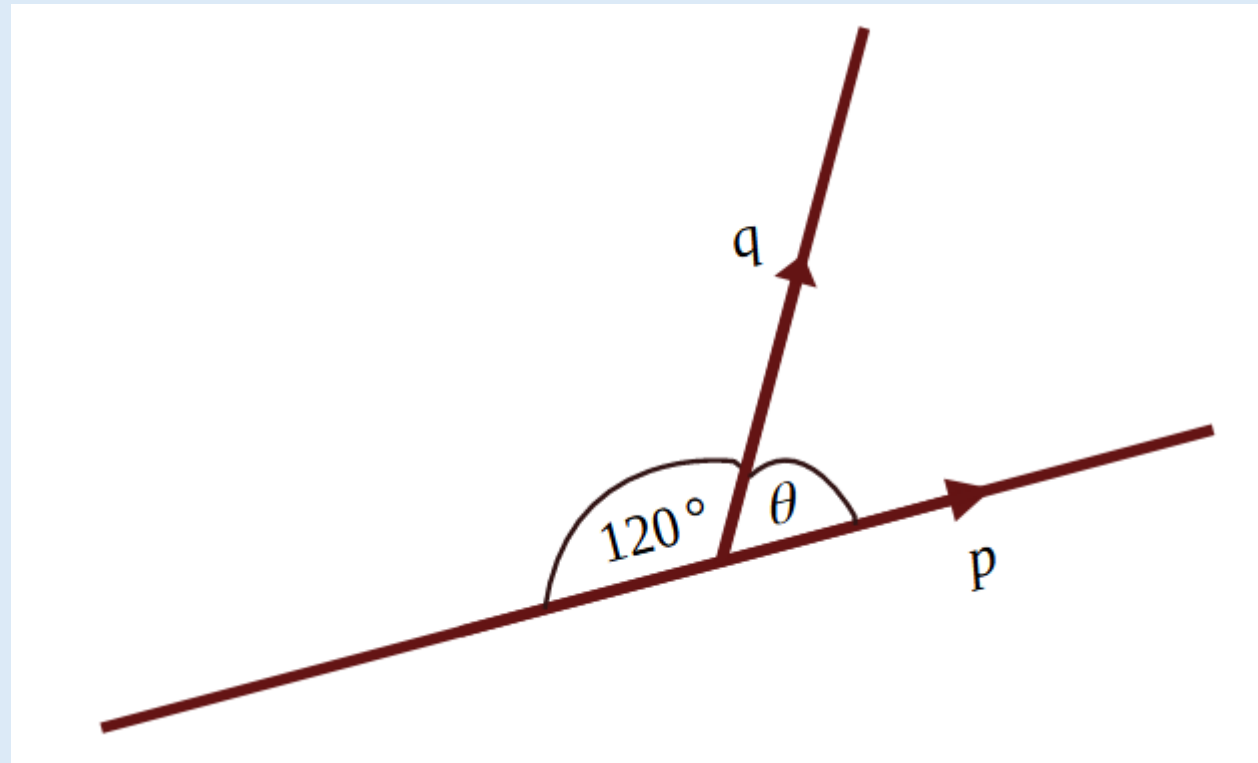


Fig. 11-22: Vector equation of a straight passing through points A and parallel to vector b illustrated.

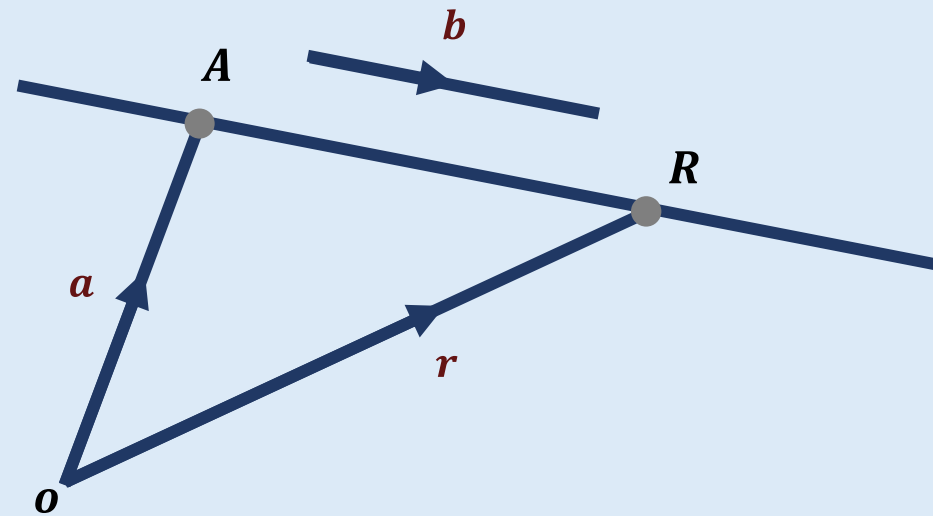
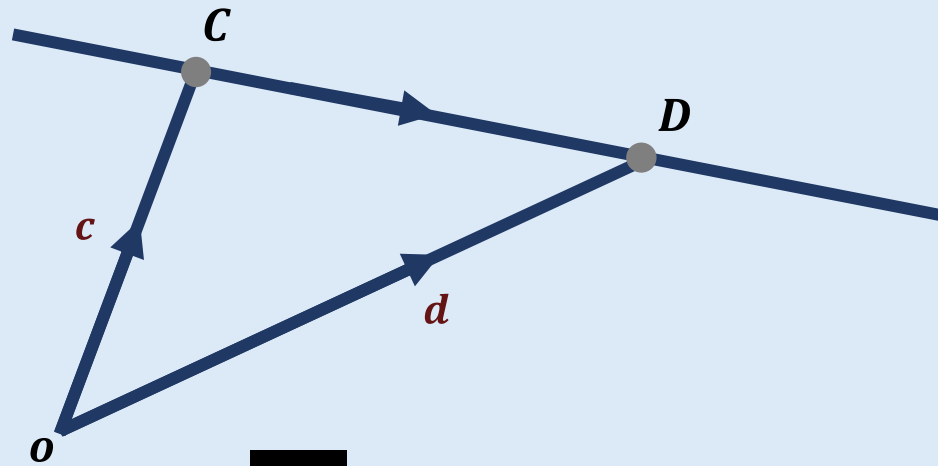
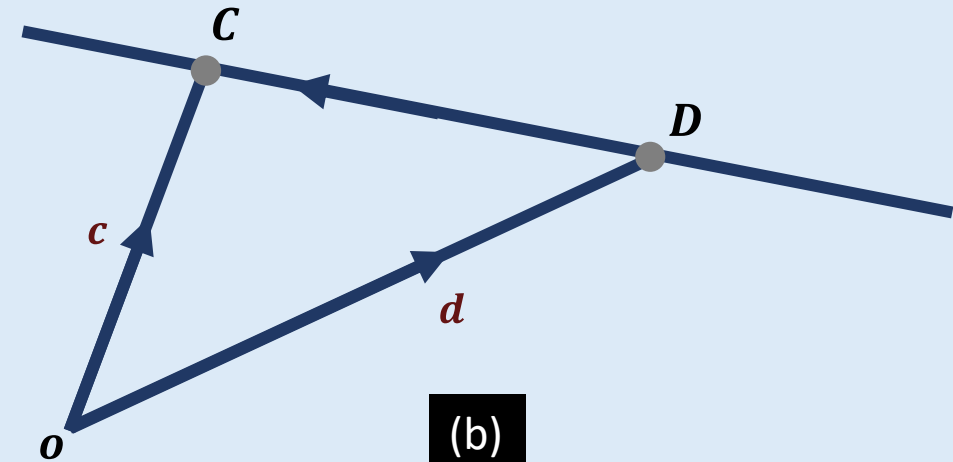


Fig. 11-23: Vector equation of a straight line passing through points C and D illustrated.



(a)



(b)



Fig. 11-24: Angle between two lines illustrated (1).

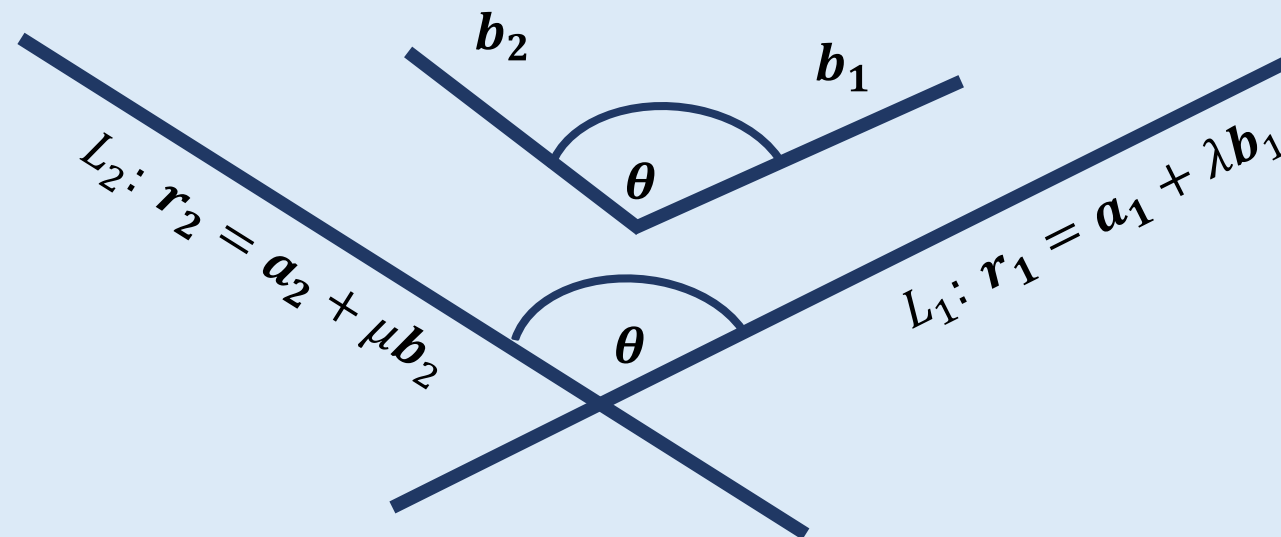
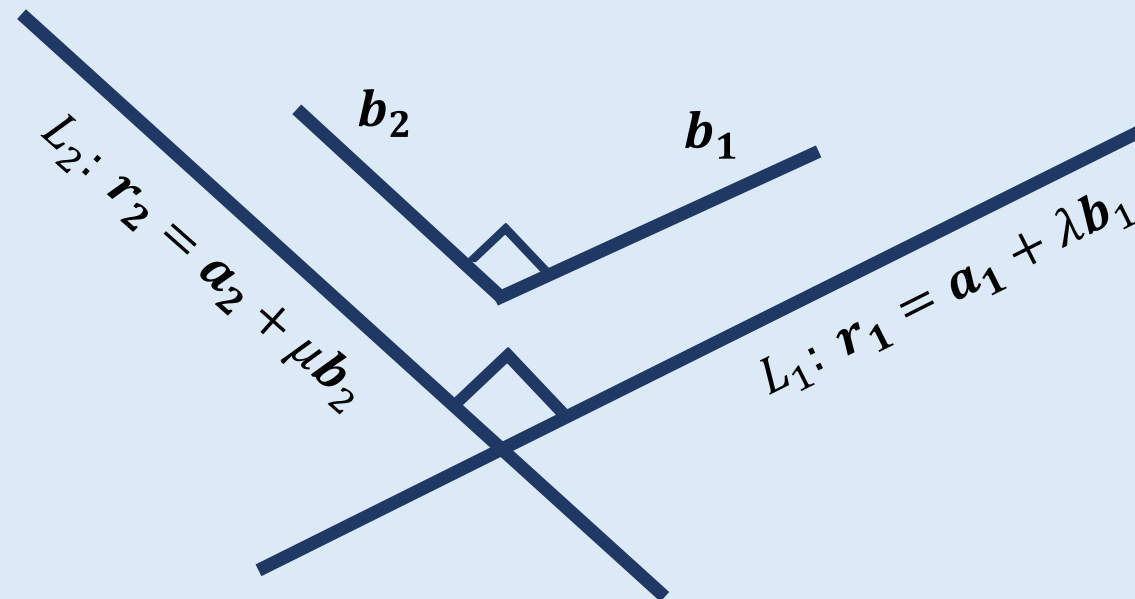


Fig. 11-25: Angle between two lines illustrated (2).



Thank You

