Algebra of Vectors, Lines, and Planes — Practice Test

Ontario Calculus and Vectors, Grade 12, University Preparation (MCV4U) • 10 questions

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **Two lines are parallel if their direction vectors are scalar multiples. The direction (2, 8) is parallel to (1, 4) because the scalar factor is**

- A 2
- B 4
- C 1
- D 3

Understand It with Pulse | Flag a mistake

2 **Two lines are parallel if their direction vectors are scalar multiples. The direction (2, 10) is parallel to (1, 5) because the scalar factor is**

- A 5
- B 1
- C 2
- D 3

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3 **The angle between vectors (3, 0) and (0, 4) in degrees, is**

- A 0
- B 90
- C 45
- D 180

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4 **The angle between vectors (5, 0) and (0, 12) in degrees, is**

A 0

B 45

C 90

D 180

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5 **The angle between vectors (6, 0) and (0, 8) in degrees, is**

A 0

B 45

C 90

D 180

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6 The angle between vectors (8, 0) and (0, 15) in degrees, is

- A 90
- B 0
- C 45
- D 180

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7 The point (2, 2, 2) lies on the plane x + y + z = 6 True or false? It is

- A true
- B false
- C unknown
- D sometimes

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8 **The point (3, 3, 3) lies on the plane x + y + z = 9 True or false? It is**

- A false
- B unknown
- C true
- D sometimes

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9 **The point (4, 4, 4) lies on the plane x + y + z = 12 True or false? It is**

- A false
- B unknown
- C sometimes
- D true

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10 **The point (5, 5, 5) lies on the plane x + y + z = 15 True or false? It is**

A false

B true

C unknown

D sometimes

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ANSWER KEY

1.	A	**5.**	C	**9.**	D
2.	C	**6.**	A	**10.**	B
3.	B	**7.**	A		
4.	C	**8.**	C		

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