**Question 3:** *Score 30/30*

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| Let http://place30.placementtester.com:8080/leicester/tmp/ag/pk/lm/ofknjjjipnbnfinjkhjoonppio.gifbe points with coordinates http://place30.placementtester.com:8080/leicester/tmp/ka/gc/ck/jogaoidplahoijdgbfhgafmgpm.gif, http://place30.placementtester.com:8080/leicester/tmp/lg/pp/em/klfdefhobapaadebcneloclbpc.gifand http://place30.placementtester.com:8080/leicester/tmp/cl/oo/oc/hhdmhkclefacijdhaniioemlpk.gifrespectively. |
| **(a)** |

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| **Your response** | **Correct response** |
| 1. What is the angle between http://place30.placementtester.com:8080/leicester/tmp/hd/an/ad/nllmddenaacabibobkimmkbaea.gifand http://place30.placementtester.com:8080/leicester/tmp/nb/eo/lj/gilakokpgfiafnmlkdgikejcod.gif? (please give an answer in RADIANS with at least 3 decimal digits) **2.707** (50%) 2. Find the area of the triangle http://place30.placementtester.com:8080/leicester/tmp/ag/ib/ap/bdbdoniifdnlpjlhedpdomonij.gif? **15.556** (50%)  | 1. What is the angle between http://place30.placementtester.com:8080/leicester/tmp/hd/an/ad/nllmddenaacabibobkimmkbaea.gifand http://place30.placementtester.com:8080/leicester/tmp/nb/eo/lj/gilakokpgfiafnmlkdgikejcod.gif? (please give an answer in RADIANS with at least 3 decimal digits) **2.707** 2. Find the area of the triangle http://place30.placementtester.com:8080/leicester/tmp/ag/ib/ap/bdbdoniifdnlpjlhedpdomonij.gif? **15.556**  | http://place30.placementtester.com:8080/leicester/modules/skin/images/grading/correct.gif**Correct** |

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| **(b)** |

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| Find the vector equation of the line through B and C: http://place30.placementtester.com:8080/leicester/tmp/gc/ni/im/mfmekilmmemllfjokfjlpoekfn.gif, where http://place30.placementtester.com:8080/leicester/tmp/hm/pb/jl/kdgjaejcphgbohpknbhkjcgmlc.gifis a real parameter. |
| **(a)** |

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|  | Enter a possible choice of the vector http://place30.placementtester.com:8080/leicester/tmp/dh/ec/na/ddapcblmcblkohjbjlcpjoabgm.gifin the form ” http://place30.placementtester.com:8080/leicester/tmp/ha/hn/nk/fekemfcocnlgdolhmemncpeclg.gif” where a,b,c are constants for you to determine. |  | http://place30.placementtester.com:8080/leicester/modules/skin/images/grading/correct.gif**Correct** |

|  |  |
| --- | --- |
| **Your Answer:** | [-9,-4,-2] |
| **Comment:** | A possible answer was http://place30.placementtester.com:8080/leicester/tmp/ai/ln/ll/neiniinbojkghhfnebjakananc.gif |

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| **(b)** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Enter a possible choice of the vector http://place30.placementtester.com:8080/leicester/tmp/oa/il/mf/gddffkiocalfmmmghmaofnikdl.gifin the form ” http://place30.placementtester.com:8080/leicester/tmp/ha/hn/nk/fekemfcocnlgdolhmemncpeclg.gif” where a,b,c are constants for you to determine. |  | http://place30.placementtester.com:8080/leicester/modules/skin/images/grading/correct.gif**Correct** |

|  |  |
| --- | --- |
| **Your Answer:** | [-16,-6,0] |
| **Comment:** | A correct answer was http://place30.placementtester.com:8080/leicester/tmp/gk/po/jl/mnkhckjfljkahfjndmeiofondl.gif |

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| **(c)** |

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| Find the vector equation of the plane through http://place30.placementtester.com:8080/leicester/tmp/po/id/im/jonlcoddciifihanecajpcipoo.gif, http://place30.placementtester.com:8080/leicester/tmp/ij/ca/on/bjiklcloihellfhjbfclmjokde.gif, and http://place30.placementtester.com:8080/leicester/tmp/ao/fc/gp/ppengniamlbggbcjopdgnendke.gif: http://place30.placementtester.com:8080/leicester/tmp/cn/om/dl/hilbgbafibeehajaloioghgcpn.gif, where http://place30.placementtester.com:8080/leicester/tmp/ng/da/ck/hpglcighnpcgbmnnmaandelfjj.gifare real parameters. |
| **(a)** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Enter a possible choice of the vector http://place30.placementtester.com:8080/leicester/tmp/dh/ec/na/ddapcblmcblkohjbjlcpjoabgm.gifin the form ” http://place30.placementtester.com:8080/leicester/tmp/ha/hn/nk/fekemfcocnlgdolhmemncpeclg.gif” where a,b,c are constants for you to determine. |  | http://place30.placementtester.com:8080/leicester/modules/skin/images/grading/correct.gif**Correct** |

|  |  |
| --- | --- |
| **Your Answer:** | [-2,-3,-1] |
| **Comment:** | A possible answer was http://place30.placementtester.com:8080/leicester/tmp/kc/en/hp/ldnpgjgpilndgmkicojppofjma.gif |

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| **(b)** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Enter possible choices of the vectors http://place30.placementtester.com:8080/leicester/tmp/oo/ha/he/domflkmdndlgecdfdnaafdoodm.gifin the form ” http://place30.placementtester.com:8080/leicester/tmp/fg/no/ff/ebgnjgenoocgmidglknejlfhjh.gif” where http://place30.placementtester.com:8080/leicester/tmp/de/cd/aj/mcopbbcfpejicmbldkhgmgenop.gifand http://place30.placementtester.com:8080/leicester/tmp/oa/nj/nb/ffmdfplipccbakdkfloaggicok.gifrepresent the ordered elements of the two vectors for you to determine. |  | http://place30.placementtester.com:8080/leicester/modules/skin/images/grading/correct.gif**Correct** |

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| --- | --- |
| **Your Answer:** | [-7,-1,-1],[9,5,-1] |
| **Comment:** | A correct response was http://place30.placementtester.com:8080/leicester/tmp/hg/kh/jn/fmoljbjahamajlggeijmkkjoal.gif |

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| **(d)** |

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|  | **Find the cartesian equation of the plane through http://place30.placementtester.com:8080/leicester/tmp/po/id/im/jonlcoddciifihanecajpcipoo.gif, http://place30.placementtester.com:8080/leicester/tmp/ij/ca/on/bjiklcloihellfhjbfclmjokde.gif, and http://place30.placementtester.com:8080/leicester/tmp/ao/fc/gp/ppengniamlbggbcjopdgnendke.gif: http://place30.placementtester.com:8080/leicester/tmp/ll/gl/dm/echdpodkbggbpmjgkkhohlomgn.gif, where http://place30.placementtester.com:8080/leicester/tmp/em/ee/pm/oeopemmhinncnbldncocadiikb.gifare constants for you to determine.** |  | **http://place30.placementtester.com:8080/leicester/modules/skin/images/grading/correct.gifCorrect** |

|  |  |
| --- | --- |
| **Your Answer:** | **x=-(-16)/(6)\*y-(-26)/(6)\*z+(62)/(6)** |
| **Correct Answer:** | **x=-(-16)/(6)\*y-(-26)/(6)\*z + (62)/(6)** |

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**Question 3:** *Score 0/30*

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| Let http://place30.placementtester.com:8080/leicester/tmp/ag/pk/lm/ofknjjjipnbnfinjkhjoonppio.gifbe points with coordinates http://place30.placementtester.com:8080/leicester/tmp/gp/pe/oa/lkbagfefdhjlepkdkenenijffn.gif, http://place30.placementtester.com:8080/leicester/tmp/jh/gi/ii/nkmaggjibhomillpgpglcdfdcp.gifand http://place30.placementtester.com:8080/leicester/tmp/dg/im/ih/acpbffljanlednmjngdgdnaakc.gifrespectively. |
| **(a)** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
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|  |  |
| --- | --- |
| **Your response** | **Correct response** |
| 1. What is the angle between http://place30.placementtester.com:8080/leicester/tmp/hd/an/ad/nllmddenaacabibobkimmkbaea.gifand http://place30.placementtester.com:8080/leicester/tmp/nb/eo/lj/gilakokpgfiafnmlkdgikejcod.gif? (please give an answer in RADIANS with at least 3 decimal digits) (0%) 2. Find the area of the triangle http://place30.placementtester.com:8080/leicester/tmp/ag/ib/ap/bdbdoniifdnlpjlhedpdomonij.gif? (0%)  | 1. What is the angle between http://place30.placementtester.com:8080/leicester/tmp/hd/an/ad/nllmddenaacabibobkimmkbaea.gifand http://place30.placementtester.com:8080/leicester/tmp/nb/eo/lj/gilakokpgfiafnmlkdgikejcod.gif? (please give an answer in RADIANS with at least 3 decimal digits) **0.787051±0.001** 2. Find the area of the triangle http://place30.placementtester.com:8080/leicester/tmp/ag/ib/ap/bdbdoniifdnlpjlhedpdomonij.gif? **70.231759±0.001**  | http://place30.placementtester.com:8080/leicester/modules/skin/images/grading/incorrect.gif**Incorrect** |

**Total grade:** 0.0×1/2 + 0.0×1/2 = 0% + 0%  |

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| **(b)** |

|  |
| --- |
| Find the vector equation of the line through B and C: http://place30.placementtester.com:8080/leicester/tmp/gc/ni/im/mfmekilmmemllfjokfjlpoekfn.gif, where http://place30.placementtester.com:8080/leicester/tmp/hm/pb/jl/kdgjaejcphgbohpknbhkjcgmlc.gifis a real parameter. |
| **(a)** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Enter a possible choice of the vector http://place30.placementtester.com:8080/leicester/tmp/dh/ec/na/ddapcblmcblkohjbjlcpjoabgm.gifin the form ” http://place30.placementtester.com:8080/leicester/tmp/ha/hn/nk/fekemfcocnlgdolhmemncpeclg.gif” where a,b,c are constants for you to determine. |  | http://place30.placementtester.com:8080/leicester/modules/skin/images/grading/incorrect.gif**Incorrect** |

|  |  |
| --- | --- |
| **Your Answer:** | No answer |
| **Comment:** | A possible answer was http://place30.placementtester.com:8080/leicester/tmp/ep/af/bj/ogigleifcamkahnbcnmkombbml.gif |

 |
| **(b)** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Enter a possible choice of the vector http://place30.placementtester.com:8080/leicester/tmp/oa/il/mf/gddffkiocalfmmmghmaofnikdl.gifin the form ” http://place30.placementtester.com:8080/leicester/tmp/ha/hn/nk/fekemfcocnlgdolhmemncpeclg.gif” where a,b,c are constants for you to determine. |  | http://place30.placementtester.com:8080/leicester/modules/skin/images/grading/incorrect.gif**Incorrect** |

|  |  |
| --- | --- |
| **Your Answer:** | No answer |
| **Comment:** | A correct answer was http://place30.placementtester.com:8080/leicester/tmp/lb/mm/go/khmojidmppmmdjfkjgoliigkdp.gif |

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| **(c)** |

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| --- |
| Find the vector equation of the plane through http://place30.placementtester.com:8080/leicester/tmp/po/id/im/jonlcoddciifihanecajpcipoo.gif, http://place30.placementtester.com:8080/leicester/tmp/ij/ca/on/bjiklcloihellfhjbfclmjokde.gif, and http://place30.placementtester.com:8080/leicester/tmp/ao/fc/gp/ppengniamlbggbcjopdgnendke.gif: http://place30.placementtester.com:8080/leicester/tmp/cn/om/dl/hilbgbafibeehajaloioghgcpn.gif, where http://place30.placementtester.com:8080/leicester/tmp/ng/da/ck/hpglcighnpcgbmnnmaandelfjj.gifare real parameters. |
| **(a)** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Enter a possible choice of the vector http://place30.placementtester.com:8080/leicester/tmp/dh/ec/na/ddapcblmcblkohjbjlcpjoabgm.gifin the form ” http://place30.placementtester.com:8080/leicester/tmp/ha/hn/nk/fekemfcocnlgdolhmemncpeclg.gif” where a,b,c are constants for you to determine. |  | http://place30.placementtester.com:8080/leicester/modules/skin/images/grading/incorrect.gif**Incorrect** |

|  |  |
| --- | --- |
| **Your Answer:** | No answer |
| **Comment:** | A possible answer was http://place30.placementtester.com:8080/leicester/tmp/ep/ke/og/akhghjkgkppldilfmcgiecmloe.gif |

 |
| **(b)** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Enter possible choices of the vectors http://place30.placementtester.com:8080/leicester/tmp/oo/ha/he/domflkmdndlgecdfdnaafdoodm.gifin the form ” http://place30.placementtester.com:8080/leicester/tmp/fg/no/ff/ebgnjgenoocgmidglknejlfhjh.gif” where http://place30.placementtester.com:8080/leicester/tmp/de/cd/aj/mcopbbcfpejicmbldkhgmgenop.gifand http://place30.placementtester.com:8080/leicester/tmp/oa/nj/nb/ffmdfplipccbakdkfloaggicok.gifrepresent the ordered elements of the two vectors for you to determine. |  | http://place30.placementtester.com:8080/leicester/modules/skin/images/grading/incorrect.gif**Incorrect** |

|  |  |
| --- | --- |
| **Your Answer:** | No answer |
| **Comment:** | A correct response was http://place30.placementtester.com:8080/leicester/tmp/eb/bh/cl/eilhccojjkjjahlpicjcdboeom.gif |

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| **(d)** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Find the cartesian equation of the plane through http://place30.placementtester.com:8080/leicester/tmp/po/id/im/jonlcoddciifihanecajpcipoo.gif, http://place30.placementtester.com:8080/leicester/tmp/ij/ca/on/bjiklcloihellfhjbfclmjokde.gif, and http://place30.placementtester.com:8080/leicester/tmp/ao/fc/gp/ppengniamlbggbcjopdgnendke.gif: http://place30.placementtester.com:8080/leicester/tmp/ll/gl/dm/echdpodkbggbpmjgkkhohlomgn.gif, where http://place30.placementtester.com:8080/leicester/tmp/em/ee/pm/oeopemmhinncnbldncocadiikb.gifare constants for you to determine. |  | http://place30.placementtester.com:8080/leicester/modules/skin/images/grading/incorrect.gif**Incorrect** |

|  |  |
| --- | --- |
| **Your Answer:** | No answer |
| **Correct Answer:** | x=-(-28)/(-105)\*y-(89)/(-105)\*z + (-24)/(-105) |

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