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

**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)** | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | |  |  | | --- | --- | | **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% | |
| **(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 | | |
| **(c)** | |  |  | | --- | --- | | 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 | | |
| **(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) | |