Geometric Proof Exercises

1. Given <EFOFEX>
id:fxe{5a5c5040-9ead-4d62-b8cc-3c9a72c43352}
FXGP:
FXData:
</EFOFEX> and <EFOFEX>
id:fxe{59712db5-9c4e-4f44-923d-854d1084f655}
FXGP:
FXData:
</EFOFEX> bisect each other at E, prove <EFOFEX>
id:fxe{da2b8aa3-e576-4136-bdce-00a3ecd9aafe}
FXGP:
FXData:
</EFOFEX>

<EFOFEX>
id:fxd{8a9ac152-c6ba-44b7-9985-ba9860181117}

FXData:

</EFOFEX>

2. Given <EFOFEX>
id:fxe{c47df713-34e7-49f2-958f-07ff2df10d7f}
FXGP:
FXData:
</EFOFEX> , prove <EFOFEX>
id:fxe{9a923595-b74d-4a9e-812e-d0f95bf4583b}
FXGP:
FXData:
</EFOFEX>

<EFOFEX>
id:fxd{6c235596-cbf7-491b-a0fa-039e6235814d}

FXData:

</EFOFEX>

3. Given <EFOFEX>
id:fxe{e485d7dd-b7b4-4e19-9537-191a46e2f72e}
FXGP:
FXData:
</EFOFEX> and <EFOFEX>
id:fxe{7cc84c87-6719-4793-ad9d-d1511d898433}
FXGP:
FXData:
</EFOFEX> prove <EFOFEX>
id:fxe{8453dbc3-b711-486b-a288-24a0621cfbb1}
FXGP:
FXData:
</EFOFEX>

<EFOFEX>
id:fxd{064e47c3-bfc2-4d43-973d-f08f91a30700}

FXData:

</EFOFEX>

4. Given <EFOFEX>
id:fxe{3d5bc745-d994-452b-9bb1-a621cb68bb7d}
FXGP:
FXData:
</EFOFEX> and <EFOFEX>
id:fxe{9038b7a4-5dd6-4454-b72d-c3d8fd0f8f5d}
FXGP:
FXData:
</EFOFEX> prove <EFOFEX>
id:fxe{fe4b9e9a-cb74-452f-a338-cb5ff0571a5e}
FXGP:
FXData:
</EFOFEX>

<EFOFEX>
id:fxd{37a55f13-1787-47cd-b7eb-9b6273feaa1f}

FXData:

</EFOFEX>

5. Given <EFOFEX>
id:fxe{e05e411d-8c08-4306-a93d-0e3ebe271a4b}
FXGP:
FXData:
</EFOFEX> prove <EFOFEX>
id:fxe{a26ffbbd-41f1-49ec-a955-7f074297763b}
FXGP:
FXData:
</EFOFEX>

<EFOFEX>
id:fxd{af880540-aab2-46df-ae3d-f1b9aa6c0a72}

FXData:

</EFOFEX>

6. Given <EFOFEX>
id:fxe{679dd42a-8aaf-4b52-9605-d851e5a2e853}
FXGP:
FXData:
</EFOFEX> and <EFOFEX>
id:fxe{a771a2ef-b84f-45bf-832f-9f52ac65af27}
FXGP:
FXData:
</EFOFEX> prove <EFOFEX>
id:fxe{b1f8bb68-ae4a-4105-97e4-a4a645ad0410}
FXGP:
FXData:
</EFOFEX>

<EFOFEX>
id:fxd{d41329c4-a8e3-435b-b8f0-ba0ab26565ed}

FXData:

</EFOFEX>

7. Given circle with centre H and <EFOFEX>
id:fxe{08982b40-f365-442a-bfac-e84b2f35ba2d}
FXGP:
FXData:
</EFOFEX> prove <EFOFEX>
id:fxe{980e16b5-e37f-45c9-9055-6cea06ea4f28}
FXGP:
FXData:
</EFOFEX>

<EFOFEX>
id:fxd{f34ee495-7ace-4b3d-8820-8b8c21fd401b}

FXData:

</EFOFEX>

8. Given <EFOFEX>
id:fxe{9e42fafe-3bde-4f81-99fa-83a742ded3a2}
FXGP:
FXData:
</EFOFEX> prove <EFOFEX>
id:fxe{4c74d6ab-9672-4c02-80c1-cb48c8b4618e}
FXGP:
FXData:
</EFOFEX>

<EFOFEX>
id:fxd{e45ffaf4-b84f-4adb-9891-6f82e75609ed}

FXData:

</EFOFEX>

9. Given <EFOFEX>
id:fxe{d6a4f273-b958-47b3-8117-c95e828ac31b}
FXGP:
FXData:
</EFOFEX> prove <EFOFEX>
id:fxe{509b2c50-c5f2-48ff-b86c-2f5b0bb65084}
FXGP:
FXData:
</EFOFEX>

<EFOFEX>
id:fxd{2af50b81-5859-472c-a365-ad03fb57d1fd}

FXData:

</EFOFEX>

10. Give D, B and F are collinear and <EFOFEX>
id:fxe{5b964899-b4a5-4461-9b3d-6f9d1a1cee0d}
FXGP:
FXData:
</EFOFEX> prove that the sum of the three angles in <EFOFEX>
id:fxe{b78ec7e9-8be1-45ce-8c3b-37a6a44cc4d7}
FXGP:
FXData:
</EFOFEX> is 180°

<EFOFEX>
id:fxd{de1cf7cc-e4db-429d-b049-cca241dce7b5}
FXGP:
FXData:
</EFOFEX>

Geometric Proof Exercise Solutions

1. <EFOFEX>
id:fxe{f4a7121b-9379-4245-8e4c-1a521d57e800}
FXGP:
FXData:
</EFOFEX>

2.

<EFOFEX>
id:fxe{a4aad938-404d-4439-8296-4e98a38ae936}
FXGP:
FXData:
</EFOFEX>

3.

<EFOFEX>
id:fxe{cd2f6076-9a64-4413-b9ab-32fc8d3555b6}
FXGP:
FXData:
</EFOFEX>

4.

<EFOFEX>
id:fxe{587588e5-6aab-40ea-96ea-69daed068167}
FXGP:
FXData:
</EFOFEX>

5.

<EFOFEX>
id:fxe{c5c94c84-4997-42b9-9639-0dc9e15ad3c0}
FXGP:
FXData:
</EFOFEX>

6.

<EFOFEX>
id:fxe{8328d6ee-471c-4641-ba6d-abaf0f372adc}
FXGP:
FXData:
</EFOFEX>

7.

<EFOFEX>
id:fxe{fcfeb145-1f65-4522-9858-6af75bd561b7}
FXGP:
FXData:
</EFOFEX>

8.

<EFOFEX>
id:fxe{fc93e714-3660-4e06-bbc3-c3330f5cadb0}
FXGP:
FXData:
</EFOFEX>

9.

<EFOFEX>
id:fxe{5ffd1287-6b77-4f99-b54a-db5c04b3059e}

FXData:

</EFOFEX>

10.

<EFOFEX>
id:fxe{ca65b087-e362-4ec7-869b-5c615034944d}

FXData:

</EFOFEX>