**Use the figure to name each of the following.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **1.**  | $ A$ $ B$ | **2.**  | $$ K$$$$ N$$ | **3.** | $ O$  $ T$ |
|  |  |  |  |  |  |

**Draw and label figure for each relationship.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **4.** | Ray $\vec{TR}$and ray$\vec{TE}$ | **5.** | Line $\overleftrightarrow{DR}$ | **6.** | Line segment$\overbar{SU}$ |
|  |  |  |  |  | $$ $$  |
| **7.** | Draw two points, $G$ and $P$. Then sketch $\vec{GP}$. Add a point $T$ on the ray so that$ T$ is between $G$ and $P$. | **8.** | Line $\overleftrightarrow{RL}$lies in plane$π$andcontains point$E,$but does not contain point $S$ | **9.** | Line segment$\overbar{SG}$ lies in plane$π$**,** and his end points are initial points of the ray$\vec{ST}$and the ray$\vec{GO}$ |
|  |  |  | $$ $$ |  |   |

**Refer to each figure.**

|  |  |  |  |
| --- | --- | --- | --- |
| **10.** | $ K$$ W$ $Q$$ H N Y$$ B Z $$π$ | Name three line segments. |  |
| Name the intersection of plane$ π$ and line$ \overleftrightarrow{KY.}$ |  |
| Name the two opposite rays at point $ H.$ |  |
| Name the intersection of line $\overleftrightarrow{BN.}$and line$ \overleftrightarrow{QZ}$ |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **11.** | $ $$ E$$W$ $ H $$ B N ε$$ K O T$ $$ π $$ | Name three collinear point in plane $ ε$. |  |
| Name the intersection of plane$ ε$ and line$ \overleftrightarrow{EN.}$ |  |
| Name the intersection of plane$ π$ and line$ \overleftrightarrow{EN.}$ |  |
| Name the intersection of line $\overleftrightarrow{BW.}$and line$ \overleftrightarrow{EN}$ |  |
| **12.** | $$ R J $$$ F D $$$ $$$ E$$ K$$π$$ L M $ | Name three planes. |  |
| Name a point that is coplanar with $ M and F$ |  |
| Name the intersection of plane$ π$ and plane $ FDM.$ |  |
| Name the intersection of plane$ MKJ$ and plane $ FDJ.$ |  |

**Draw and label figure for each relationship.**

|  |  |  |
| --- | --- | --- |
| **13.** | Lines $\overleftrightarrow{BJ}$and $\overleftrightarrow{PK}$intersect in point$ G$in plane$ π.$The intersection of plane$ π$ and line $ \overleftrightarrow{DM}$ispoint $M.$ |  |
| **14.** | The intersection of plane$ π$ and plane $ τ$isline$\overleftrightarrow{ DR}.$ |  |
| **15.** | Plane $ ε$and plane$ π$do not has intersect.Plane $τ$intersect plane$ π $in line$\overleftrightarrow{NY}$**.**Plane $τ$intersect plane$ ε $in line$\overleftrightarrow{JM}$**.** |  |

**ANSWERS**

**Use the figure to name each of the following.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **1.**  | $ A$ $ B$ | **2.**  | $$ K$$$$ N$$ | **3.** | $ O$  $ T$ |
|  | Line $\overleftrightarrow{AB}$ |  | Line segment $\overbar{KN}$ |  | Ray $\vec{OT}$ |

**Draw and label figure for each relationship.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **4.** | Ray $\vec{TR}$and ray$\vec{TE}$ | **5.** | Line $\overleftrightarrow{DR}$ | **6.** | Line segment$\overbar{SU}$ |
|  | $$ R T E$$  |  | $$ R$$$$ D$$ |  | $$ $$$ S U$  |
| **7.** | Draw two points, $G$ and $P$. Then sketch $\vec{GP}$. Add a point $T$ on the ray so that$ T$ is between $G$ and $P$. | **8.** | Line $\overleftrightarrow{RL}$lies in plane$π$andcontains point$E,$but does not contain point $S$ | **9.** | Line segment$\overbar{SG}$ lies in plane$π$**,** and his end points are initial points of the ray$\vec{ST}$and the ray$\vec{GO}$ |
|  | $$ P T G$$  |  | $ L$$ E$$ R S$ $$ π$$$$ $$ |  | $ $$ O$$ S G$$ T$$$ π$$  |

**Refer to each figure.**

|  |  |  |  |
| --- | --- | --- | --- |
| **10.** | $ K$$ W$ $Q$$ H N Y$$ B Z $$π$ | Name three line segments. | $$\overbar{HQ}, \overbar{BN},\overbar{KY}$$ |
| Name the intersection of plane$ π$ and line$ \overleftrightarrow{KY.}$ | Point$ W$ |
| Name the two opposite rays at point $ H.$ | $$\vec{HB} and \vec{HN}$$ |
| Name the intersection of line $\overleftrightarrow{BN.}$and line$ \overleftrightarrow{QZ}$ | Point$ H $ |

|  |  |  |  |
| --- | --- | --- | --- |
| **11.** | $ $$ E$$W$ $ H $$ B N ε$$ K O T$ $$ π $$ | Name three collinear point in plane $ ε$. | $$B,H and W$$ |
| Name the intersection of plane$ ε$ and line$ \overleftrightarrow{EN.}$ | Point$ H$ |
| Name the intersection of plane$ π$ and line$ \overleftrightarrow{EN.}$ | Point$ O$ |
| Name the intersection of line $\overleftrightarrow{BW.}$and line$ \overleftrightarrow{EN}$ | Point$ H $ |
| **12.** | $$ R J $$$ F D $$$ $$$ E$$ K$$π$$ L M $ | Name three planes. | $$FRD, MKJ, ELR$$ |
| Name a point that is coplanar with $ M and F$ | Point$ D$ |
| Name the intersection of plane$ π$ and plane $ FDM.$ | Line$\overleftrightarrow{LM.}$ |
| Name the intersection of plane$ MKJ$ and plane $ FDJ.$ | Line$\overleftrightarrow{DJ.}$ |

**Draw and label figure for each relationship.**

|  |  |  |
| --- | --- | --- |
| **13.** | Lines $\overleftrightarrow{BJ}$and $\overleftrightarrow{PK}$intersect in point$ G$in plane$ π.$The intersection of plane$ π$ and line $ \overleftrightarrow{DM}$ispoint $M.$ | $ D$$ B $$ G M K$$P J $$$π$$ |
| **14.** | The intersection of plane$ π$ and plane $ τ$isline$\overleftrightarrow{ DR}.$ | $$ $$$ $$ R$$$ τ$$$ D$$$ π$$ |
| **15.** | Plane $ ε$and plane$ π$do not has intersect.Plane $τ$intersect plane$ π $in line$\overleftrightarrow{NY}$**.**Plane $τ$intersect plane$ ε $in line$\overleftrightarrow{JM}$**.** | $ $$ τ$$ N$$ $$ $$ $$ Y π$$ J $$$ $$$ M ε$ |