Look at the following figure and answer the questions below.


1) Which line is parallel to $\overleftrightarrow{U V}$ ? $\qquad$
2) Name the lines that are parallel to line $C D$.
3) Is line $X Y$ perpendicular to line $A B$ ? $\qquad$
4) $\overleftrightarrow{C D}$ and $\overleftrightarrow{E F}$ are intersected by which line ?
5) Are line $X Y$ and line $O P$ parallel lines ?
6) Is Line OP perpendicular to any other line other than $\overleftrightarrow{E F}$ ?
7) Name the lines that are intersected line ST?
8) Explain the relationship between $\overleftrightarrow{X Y}$ and $\overleftrightarrow{C D}$.
9) Are $\overleftrightarrow{X Y}$ and $\overleftrightarrow{U V}$ perpendicular lines?

## ANSWERS

1) $\overleftrightarrow{S T}$
2) $\overleftrightarrow{A B}$ and $\overleftrightarrow{E F}$
3) Yes
4) $\overleftrightarrow{U V}$.... Both the lines are also intersected by line XY but they are perpendicular to it.
5) Yes, they are parallel lines.
6) Yes. It is also perpendicular to line $A B$ and line $C D$ because when you extend line it upwards, it intersects both the lines at 90 degrees.
7) $\overleftrightarrow{A B}, \overleftrightarrow{C D}$ and $\overleftrightarrow{E F}$
$\underset{\longleftrightarrow}{8)} X Y$ and $C D$ are perpendicular lines because when you extend $\overleftrightarrow{X Y}$, it cuts $C D$ at a right angle.
8) No they are just intersecting lines.
