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1 The coordinates of the endpoints of $\overline{A B}$ are $A(0,0)$ and $B(0,6)$. The equation of the perpendicular bisector of $\overline{A B}$ is

1) $x=0$
2) $x=3$
3) $y=0$
4) $y=3$

2 Which equation represents the perpendicular bisector of $\overline{A B}$ whose endpoints are $A(8,2)$ and $B(0,6)$ ?

1) $y=2 x-4$
2) $y=-\frac{1}{2} x+2$
3) $y=-\frac{1}{2} x+6$
4) $y=2 x-12$

3 Triangle $A B C$ has vertices $A(0,0), B(6,8)$, and $C(8,4)$. Which equation represents the perpendicular bisector of $\overline{B C}$ ?

1) $y=2 x-6$
2) $y=-2 x+4$
3) $y=\frac{1}{2} x+\frac{5}{2}$
4) $y=-\frac{1}{2} x+\frac{19}{2}$

4 If $\overline{A B}$ is defined by the endpoints $A(4,2)$ and $B(8,6)$, write an equation of the line that is the perpendicular bisector of $\overline{A B}$.

5 Write an equation of the line that is the perpendicular bisector of the line segment having endpoints $(3,-1)$ and $(3,5)$. [The use of the grid below is optional]

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6 Write an equation of the perpendicular bisector of the line segment whose endpoints are $(-1,1)$ and $(7,-5)$. [The use of the grid below is optional]


7 Determine the distance between point $A(-1,-3)$ and point $B(5,5)$. Write an equation of the perpendicular bisector of $\overline{A B}$. [The use of the accompanying grid is optional.]


