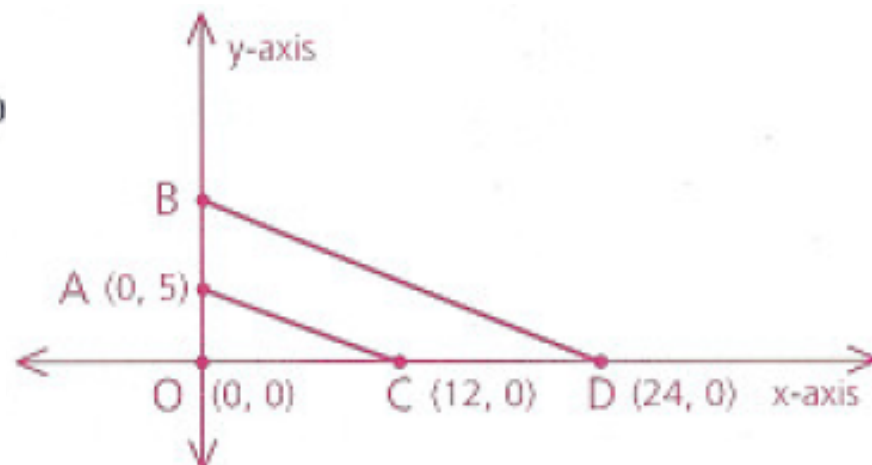


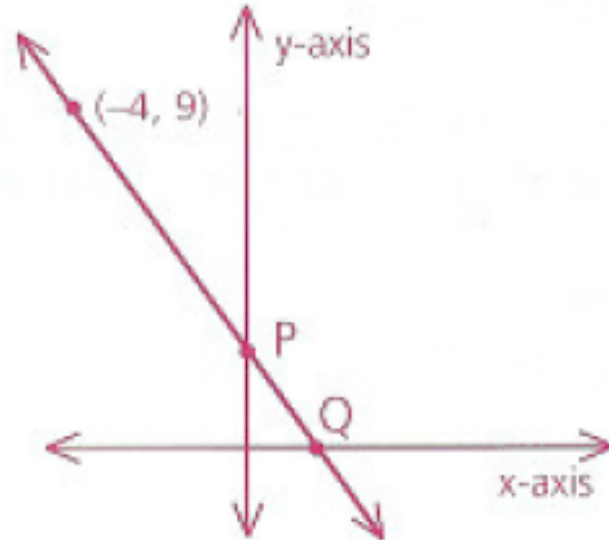
Homework p.341: 6, 8, 10, 12, 19

- 6** Find the coordinates of B if $\triangle OAC \sim \triangle OBD$. Then write a paragraph proof to show that $\triangle OAC \sim \triangle OBD$. Challenge: Can you find the length of \overline{BD} ?

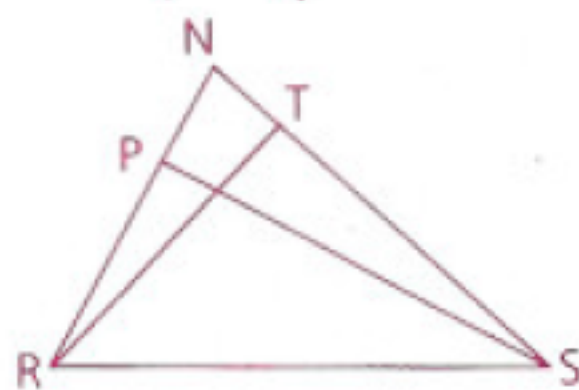


- 8** In $\triangle FGH$, $FG = 6$, $GH = 8$, and $FH = 12$. $\triangle FGH$ is projected onto a wall, and the image, $\triangle F'G'H'$, has sides $F'G' = 15$, $G'H' = 20$, and $F'H' = 30$. Is $\triangle FGH$ similar to $\triangle F'G'H'$? Explain.

- 10** The slope of line PQ is $-\frac{3}{2}$. Find the coordinates of P and Q.



- 12** Given: \overline{SP} is the altitude from S to \overline{NR} .
 \overline{RT} is the altitude from R to \overline{NS} .
 Conclusion: $\triangle NRT \sim \triangle NSP$



- 19** Given: Figure as shown

- a** Is $\triangle PQT \sim \triangle PRS$? Justify your reasoning.
b Is \overline{QT} parallel to \overline{RS} ? Justify your reasoning.

