

Name _____

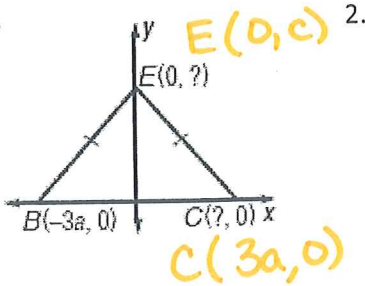
Hour: _____

Final Answers... students must show work to receive credit

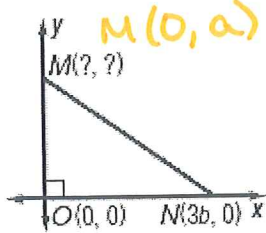
Practice Triangle Coordinate Geometry

Find the missing coordinates of each triangle.

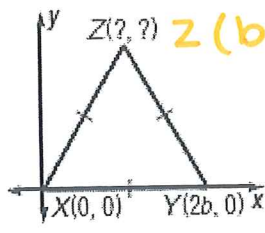
1.



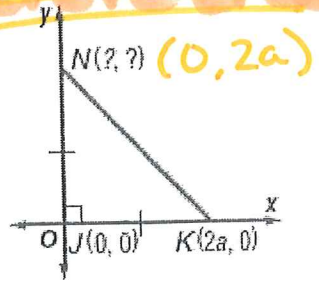
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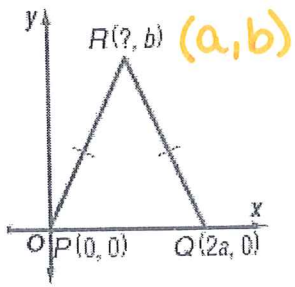
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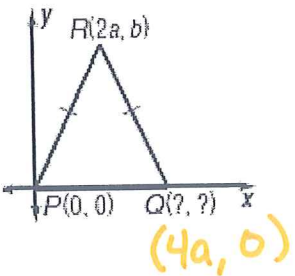
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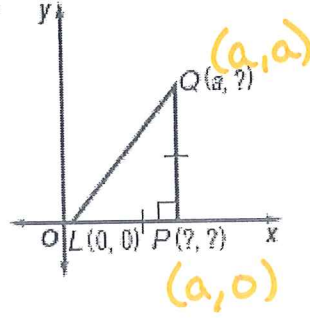
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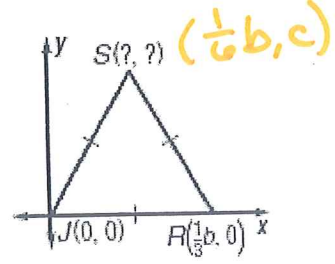
6.



7.



8.



Use the triangle to the right to answer the following questions.

9. a). Find the slope of SR and ST.

$SR = 1$
 $ST = -1$

b). What does this tell you about triangle RST?

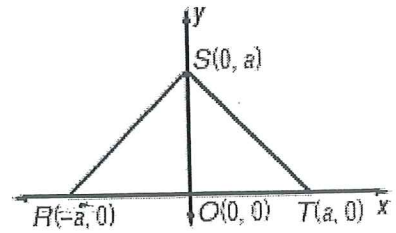
\perp slopes ... right \triangle

c). Find the length of SR and ST.

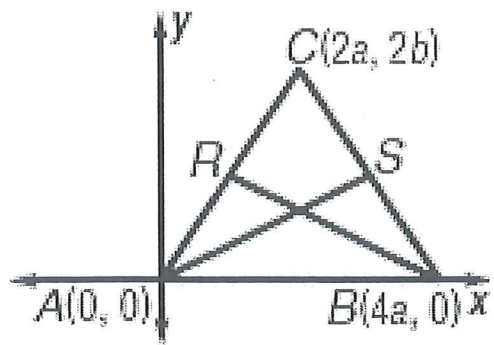
$SR = a\sqrt{2}$
 $ST = a\sqrt{2}$

d). What does this about triangle RST?

Right Isosceles Triangle



10. Given: isosceles $\triangle ABC$ with $\overline{AC} \cong \overline{BC}$
 R and S are midpoints of legs \overline{AC} and \overline{BC} .
 Find points S and R .

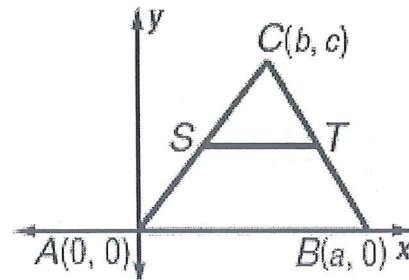


$$S(3a, b)$$

$$R(a, b)$$

Show work for credit

11. Given: $\triangle ABC$
 S is the midpoint of \overline{AC} .
 T is the midpoint of \overline{BC} .
 Find S and T .



$$S\left(\frac{b}{2}, \frac{c}{2}\right)$$

$$T\left(\frac{b+a}{2}, \frac{c}{2}\right)$$

Show work for credit

12. Katrina lives 6 miles east and 4 miles north of her high school. The mall is 2 miles west and 3 miles north of the school. Write a coordinate proof to prove that Katrina's high school, home and the mall form a right triangle.

It is a right \triangle .

Show work for credit