Name_____

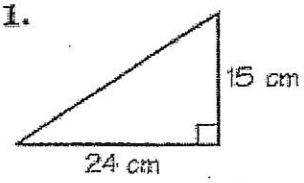
Concept #20 Practice – Pythagorean Theorem

Determine whether or not the given numbers are possible measures for the sides of a right triangle. Show all work.

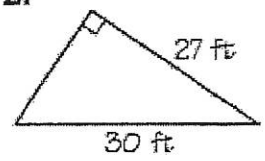
$a = 30$ $b = 40$ $c = 50$	$a = 40$ $b = 50$ $c = 60$	$a = 10$ $b = 24$ $c = 26$
$a^2 =$____ $b^2 =$____ $c^2 =$____	$a^2 =$____ $b^2 =$____ $c^2 =$____	$a^2 =$____ $b^2 =$____ $c^2 =$____
13 Right triangle? yes **h-L** no **s-A**	14 Right triangle? yes **l-S** no **n-I**	15 Right triangle? yes **u-U** no **g-E**
$a = 0.9$ $b = 4.0$ $c = 4.1$	$a = \sqrt{2}$ $b = \sqrt{2}$ $c = 2$	$a = 1$ $b = 1$ $c = \sqrt{2}$
$a^2 =$____ $b^2 =$____ $c^2 =$____	$a^2 =$____ $b^2 =$____ $c^2 =$____	$a^2 =$____ $b^2 =$____ $c^2 =$____
16 Right triangle? yes **d-H** no **c-R**	17 Right triangle? yes **j-S** no **p-O**	18 Right triangle? yes **s-N** no **l-T**

Find the missing side length, if possible.

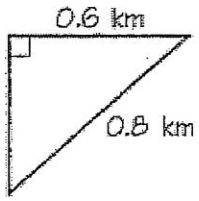
1.



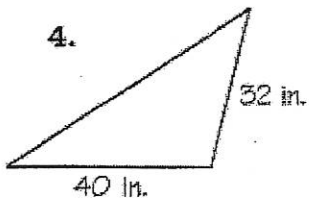
2.



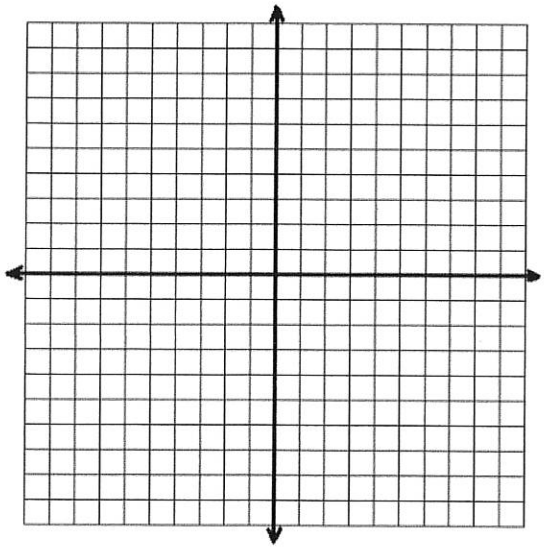
3.



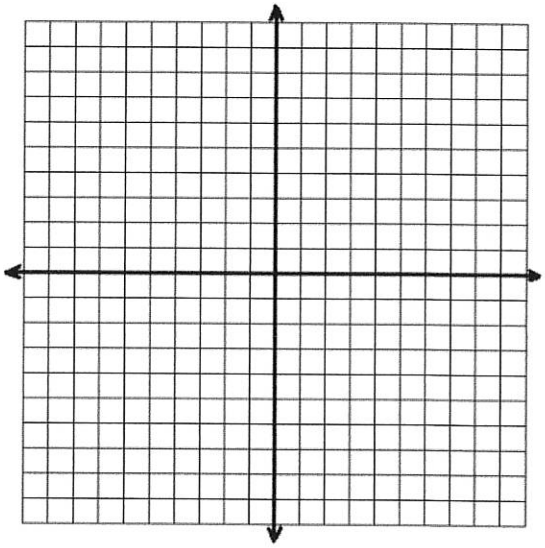
4.



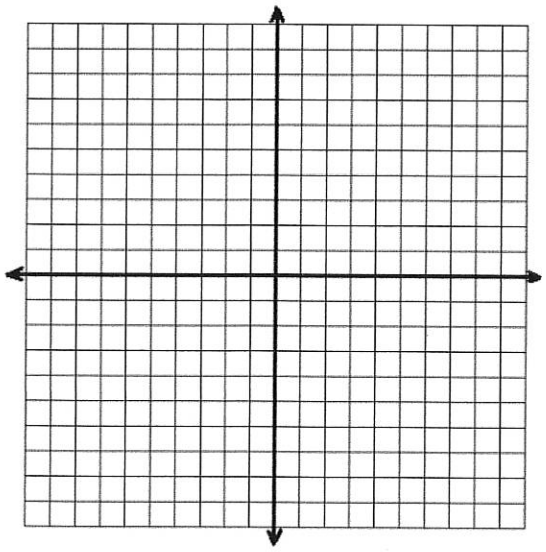
❶ Distance between $A(-6,4)$ and $B(5,1)$.



❷ Distance between $C(-2,6)$ and $D(-2,-2)$.



❸ Distance between $A(7,0)$ and $B(-5,-6)$.



❹ Distance between $A(-4,0)$ and $B(8,-3)$.