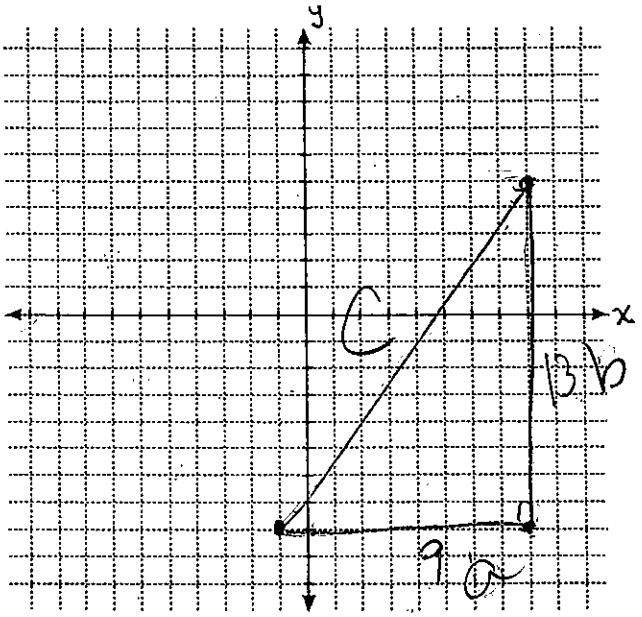
#51

Name Key
Date _____

* Homework *

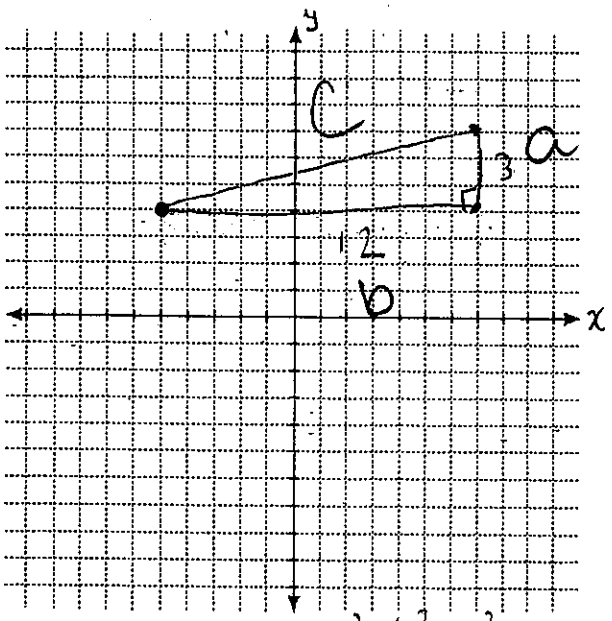
Find the distance between each pair of points. Round your answer to the nearest tenth when necessary.

1) (8, 5), (−1, −8)



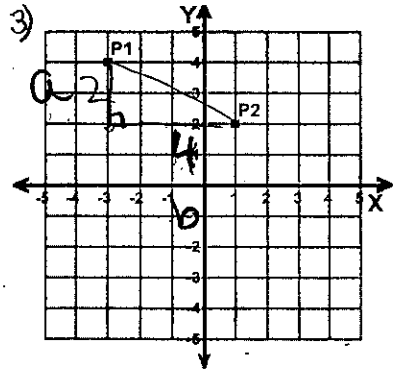
$a^2+b^2=c^2$
$9^2+13^2=c^2$
$81+169=c^2$
$\sqrt{250}=\sqrt{c^2}$
$c=15.8u$

2) (−5, 4), (7, 7)



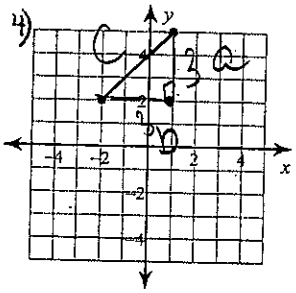
$a^2+b^2=c^2$
$3^2+12^2=c^2$
$9+144=c^2$
$\sqrt{153}=\sqrt{c^2}$
$c=12.4u$

3)



$a^2+b^2=c^2$
$2^2+4^2=c^2$
$4+16=c^2$
$\sqrt{20}=\sqrt{c^2}$
$c=4.5u$

4)



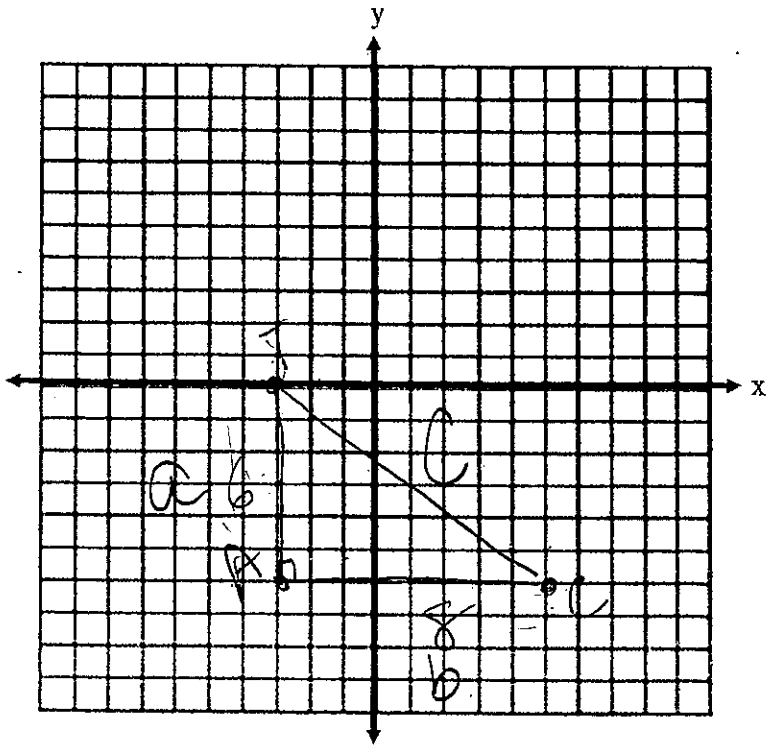
$a^2+b^2=c^2$
$3^2+3^2=c^2$
$9+9=c^2$
$\sqrt{18}=\sqrt{c^2}$
$c=4.2u$

*Turn over

5) a) Plot the points below and connect them to form right triangle CAT.

C(5,-6)
A(-3,-6)
T(-3,0)

B) Find the length of the hypotenuse $\overline{TC}$. Round your answer to the nearest tenth
(Show work)



$a^2 + b^2 = c^2$

$6^2 + 8^2 = c^2$

$36 + 64 = c^2$

$\sqrt{100} = \sqrt{c^2}$

$c = 10$

$\overline{TC} = 10.0$ u