# PYTHAGOREAN THEOREM WORKSHEET
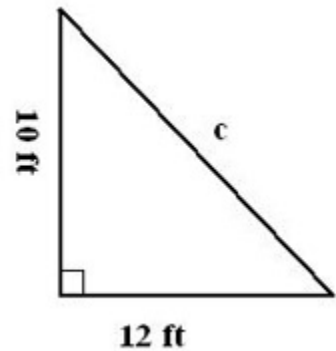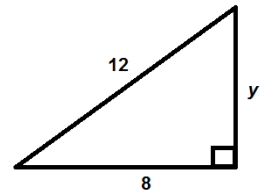## TOPIC 4.4

Name:_____

Date:_____

For the following problems, use your knowledge of the Pythagorean Theorem to solve for the unknown sides. Show your work and label the units.
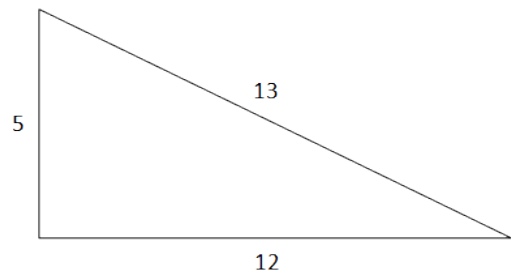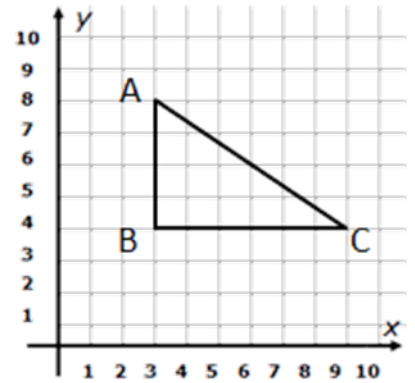
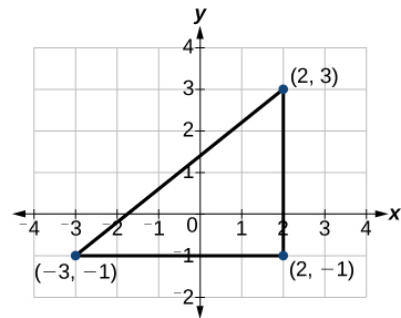1) Find the missing side length c.

2) Find the missing leg y.

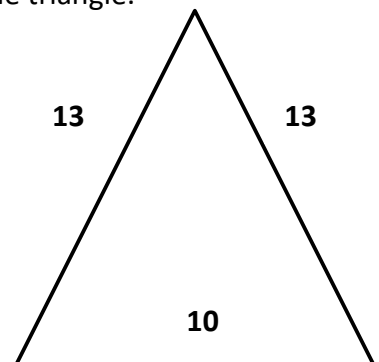3) Are the indicated lengths correct? How do you know? Show your work.

4) Find the side lengths AB, AC, and BC.



5) Label the sides. Find the length of the hypotenuse.



6) Bonus: To the right is an isosceles triangle. Find the height of the triangle.



13    13

10

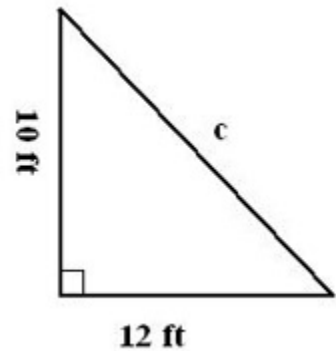# PYTHAGOREAN THEOREM WORKSHEET
## TOPIC 4.4

Name:_____

Date:_____

For the following problems, use your knowledge of the Pythagorean Theorem to solve for the unknown sides. Show your work and label the units.

1) Find the missing side length c.

$12^2+10^2=c^2$

$144+100=244$

$C=15.620$ feet

2) Find the missing leg y.
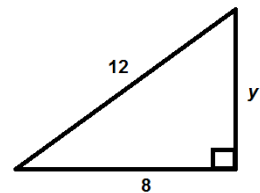
$8^2+y^2=12^2$

$144-64=y^2$

$80=y^2$

$y=8.944$ units
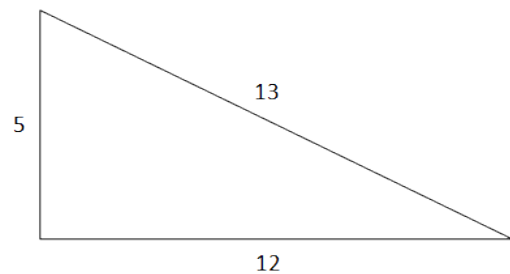
3) Are the indicated lengths correct? How do you know? Show your work.

$5^2+12^2=13^2$

$25+144=169$
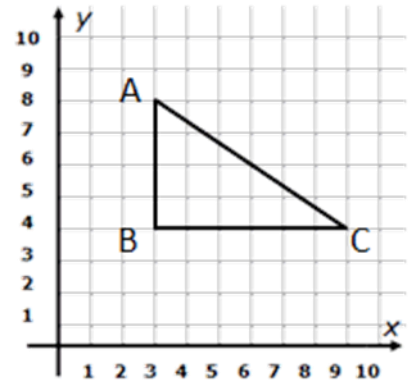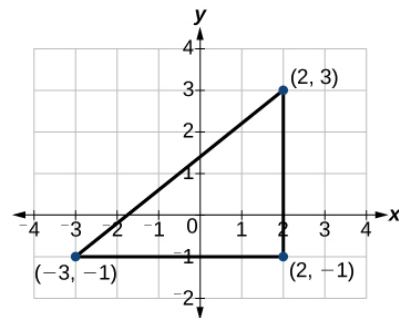
$169=169.$

Yes, the lengths are correct.

4) Find the side lengths AB, AC, and BC.

AB=4 units
BC=6 units
4^2+6^2=AC^2
16+36=52
AC=7.211 units

5) Label the sides. Find the length of the hypotenuse.
A=(-3, -1)
B=(2, -1)
C=(2, 3)
5^2+4^2=hyp^2
25+16=41
Hyp or AC=6.403 units

6) Bonus: To the right is an isosceles triangle. Find the height of the triangle.

5^2+b^2=13^2
169-25=b^2
144=b^2
Height=12 units