

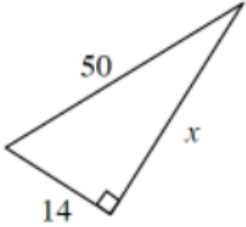
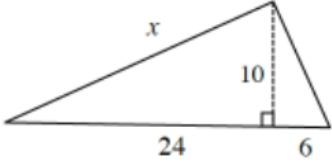
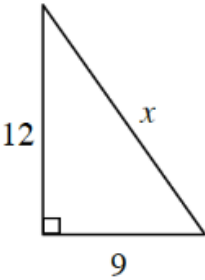
Name _____

Period ____ Date _____

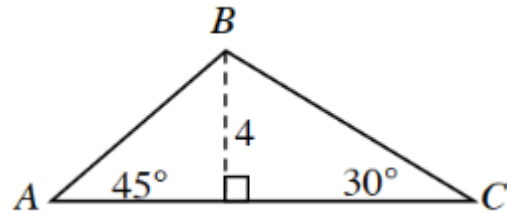
Homework 6.1.4

1. Rewrite $27\frac{2}{3}$ in as many different ways as you can.

2. Use what you know about Pythagorean Triples to determine the measure of the third side. (if you don't recognize a Pythagorean Triple you can always simply use the Pythagorean Theorem)

<p>a.</p>  <p>A right-angled triangle with a right angle symbol at the bottom vertex. The left leg is labeled 14, the right leg is labeled x, and the hypotenuse is labeled 50.</p>	<p>b.</p>  <p>A triangle with a horizontal base divided into two segments of length 24 and 6. A vertical dashed line from the top vertex to the base represents a height of 10, with a right angle symbol at the base. The hypotenuse is labeled x.</p>	<p>c.</p>  <p>A right-angled triangle with a right angle symbol at the bottom-left vertex. The vertical leg is labeled 12, the horizontal leg is labeled 9, and the hypotenuse is labeled x.</p>
---	---	--

3. Calculate the area and perimeter of $\triangle ABC$ at right.
Give both exact and approximate (decimal) answers.



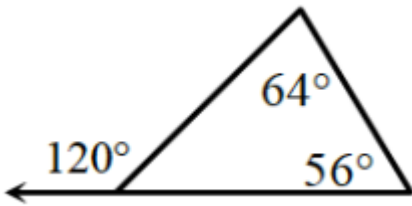
4. Solve each quadratic equation below. You may need to use a calculator.

a) $3x^2 - 4x = 5$ (Hint: First need to move the 5!)

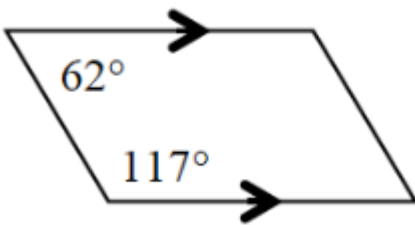
b) $(3x - 2)^2 = 16$

5. Examine the information provided in each diagram below. Decide if each figure is possible or not. If the figure is not possible, explain why not.

a)



b)



c)

