

Ch. 7 - Assignment #1 -

Name _____ date _____

Solve the same quadratic equation, $x^2 - 2x - 5 = 0$ using the two methods below. keep answers exact.

A. Use completing the Square

B. Use the quadratic formula

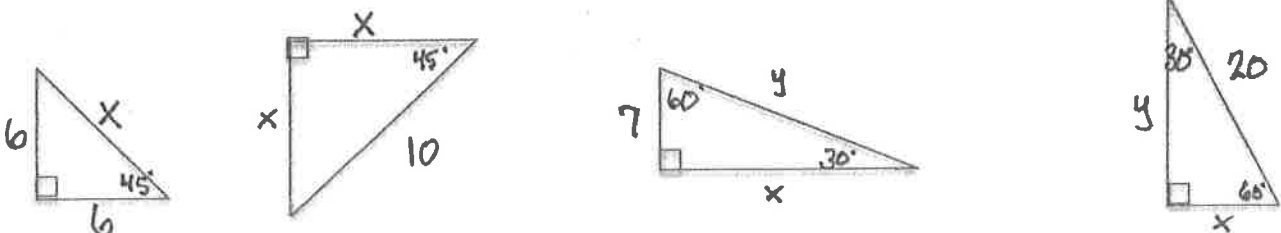


2. Create an exponential equation, in the form $y = ab^x + c$, that has an asymptote of $y=5$. You can use the method of *double substitution*. The function needs to pass through the two points (2, 23) and (6, 96.125).

→ Check your equation using your GDC table. What is the y-intercept of your equation? _____

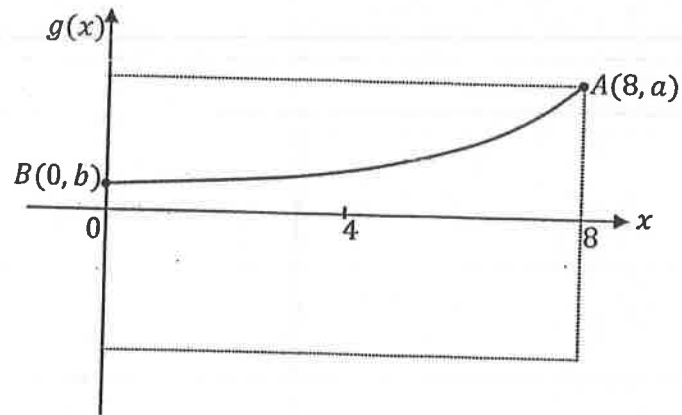
3. Geometry Again! Find length of x

In a $45^\circ 45^\circ 90^\circ$ right triangle, hypotenuse is equal to $\sqrt{2}$ times the length of the each leg.
In a $30^\circ 60^\circ 90^\circ$ right triangle, hypotenuse is 2 times the length of the base and the longer leg is $\sqrt{3}$ times the length of the short leg.



4.

The graph of $g(x) = 1000(1.25)^x$ where $0 \leq x \leq 8$ containing points A and B is shown on the set of axes below.



- If point A has the coordinates $(8, a)$ then find a .
- If point B has the coordinates $(0, b)$ then find b .
- Sketch and clearly label the graph of $-g(x)$ on the same axes shown above.

From your textbook, do: 6 - 132, and 145