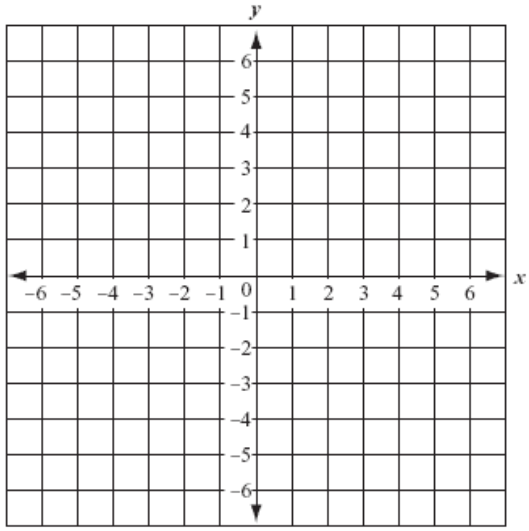
Pre-Calculus CP Summer Work Name_____
Larson Pre- Calculus Chapter 1

Parent Graphs and Transformations
Video to help: https://www.youtube.com/watch?v=69-1p1iowXk

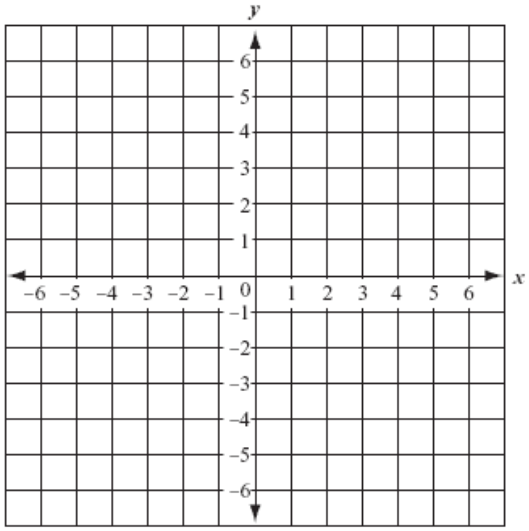
Graph the 4 parent graphs AND the transformations.

Parent Graphs	Transformation
1. $y = x^2$	$y = (x+3)^2 - 2$
2. $y = \lvert x \rvert$	$y = -2\lvert x - 1 \rvert$
3. $\sqrt{x}$	$y = \frac{1}{2}\sqrt{x+3}$

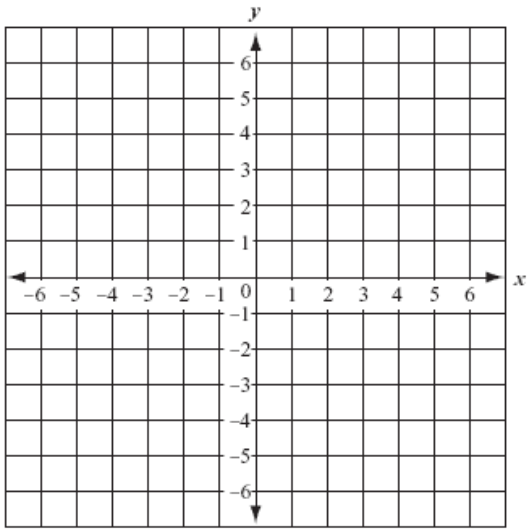
1.



2.

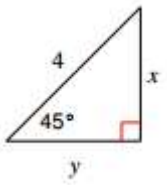


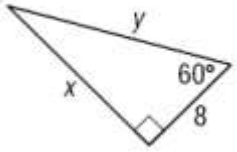
3.

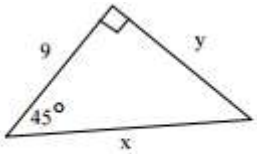


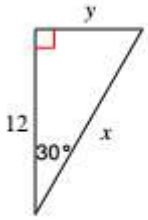
Special Right Triangles, 45-45-90 and 30-60 90
Video to help
https://www.youtube.com/watch?v=7B1yrRLSRT8

4. Find the missing sides in each of the following triangles









Answers

$x = 2\sqrt{2}$	$x = 8\sqrt{3}$	$x = 9\sqrt{2}$	$x = 8\sqrt{3}$
$y = 2\sqrt{2}$	$y = 16$	$y = 9$	$y = 4\sqrt{3}$

Factoring
Video to help: https://www.youtube.com/watch?v=HvBiJ9W00Z4

5. Factor:

$x^2 - 9$

$x^2 - 2x - 24$

$3x^2 + 11x + 6$

The Quadratic Formula

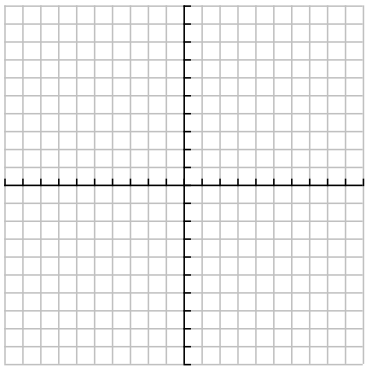
Video to help: https://www.youtube.com/watch?v=-gwz6d9NYz0

6. Solve using the quadratic formula $2x^2 + 5x = 4$

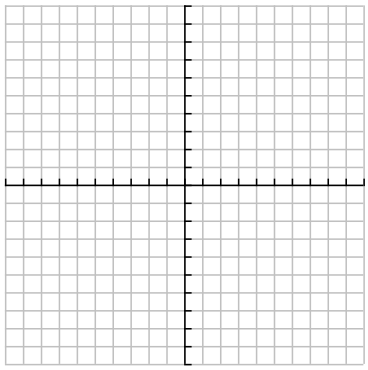
7. Solve using the quadratic formula $3x^2 + 2x + 5 = 0$

Graph a line from slope intercept form.
Video to help
https://www.youtube.com/watch?v=WQyvskZSCJg

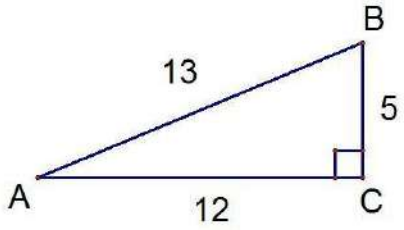
8. Graph $y = \frac{2}{3}x - 1$



9. $y = -3x + 4$



Right Triangle Trig – **SOHCAHTOA**
Video to help
https://www.youtube.com/watch?v=VRz2d5yedsg



Given ΔABC

16. Find $\sin A$ $\sin B$

17. Find $\cos A$ $\cos B$

18. Find $\tan A$ $\tan B$