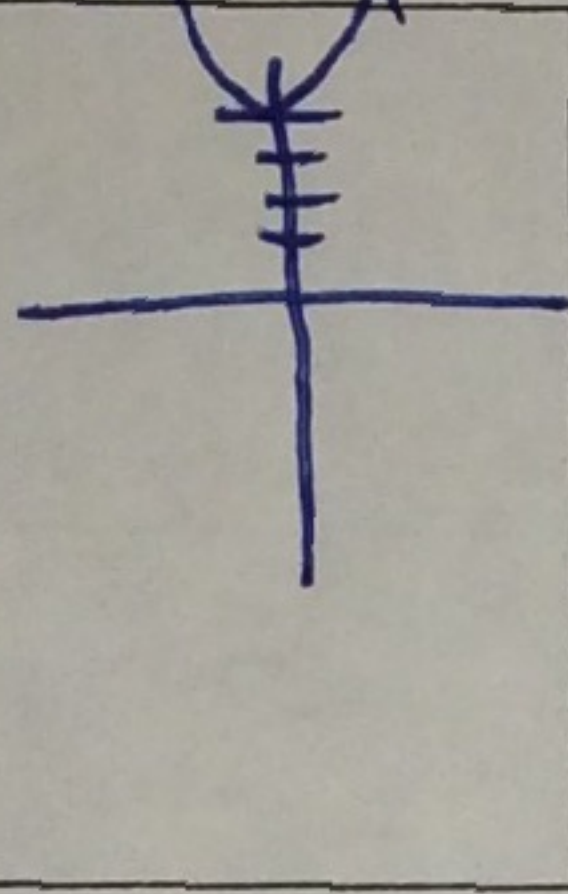
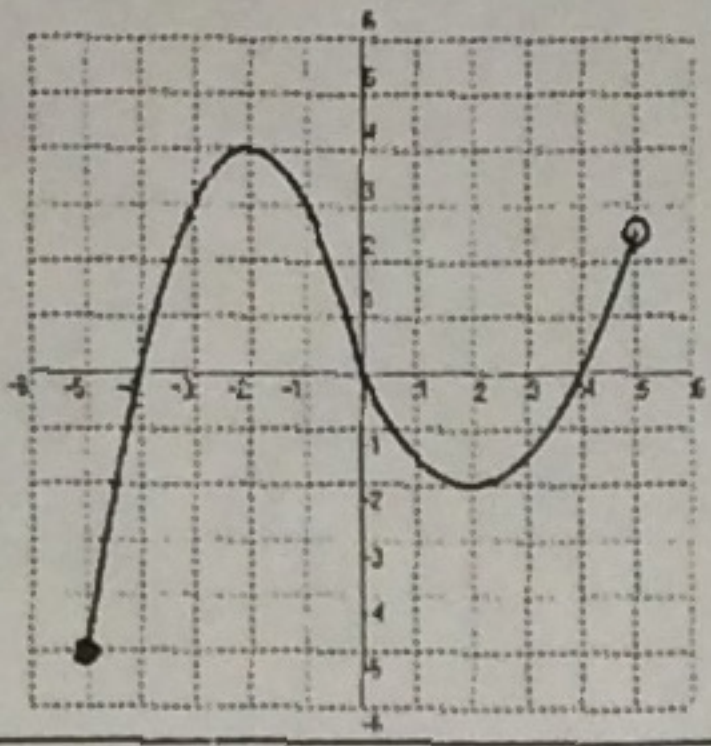
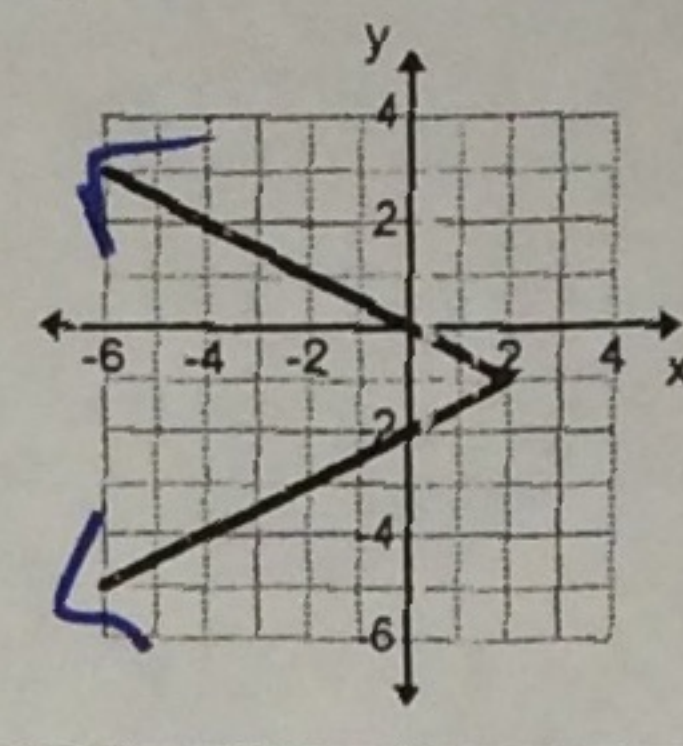


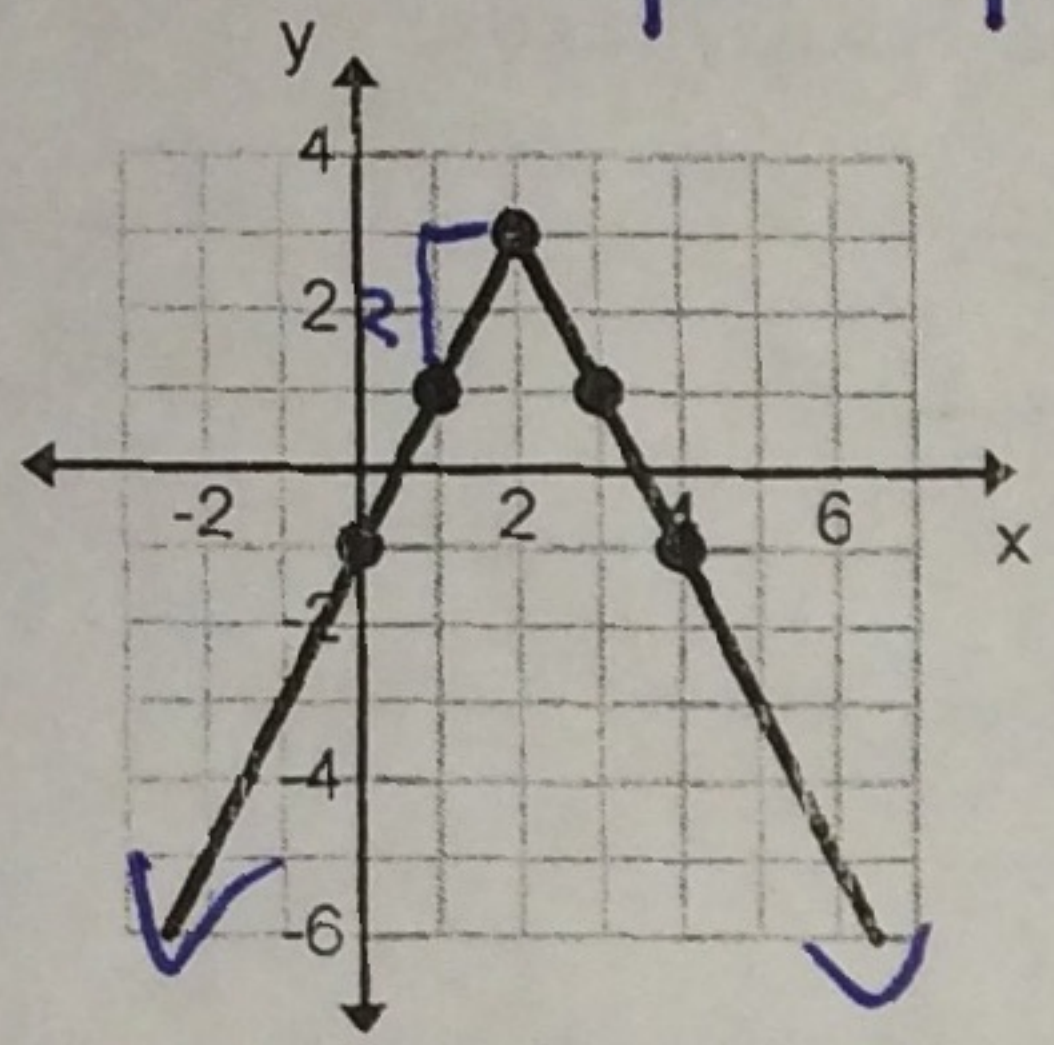
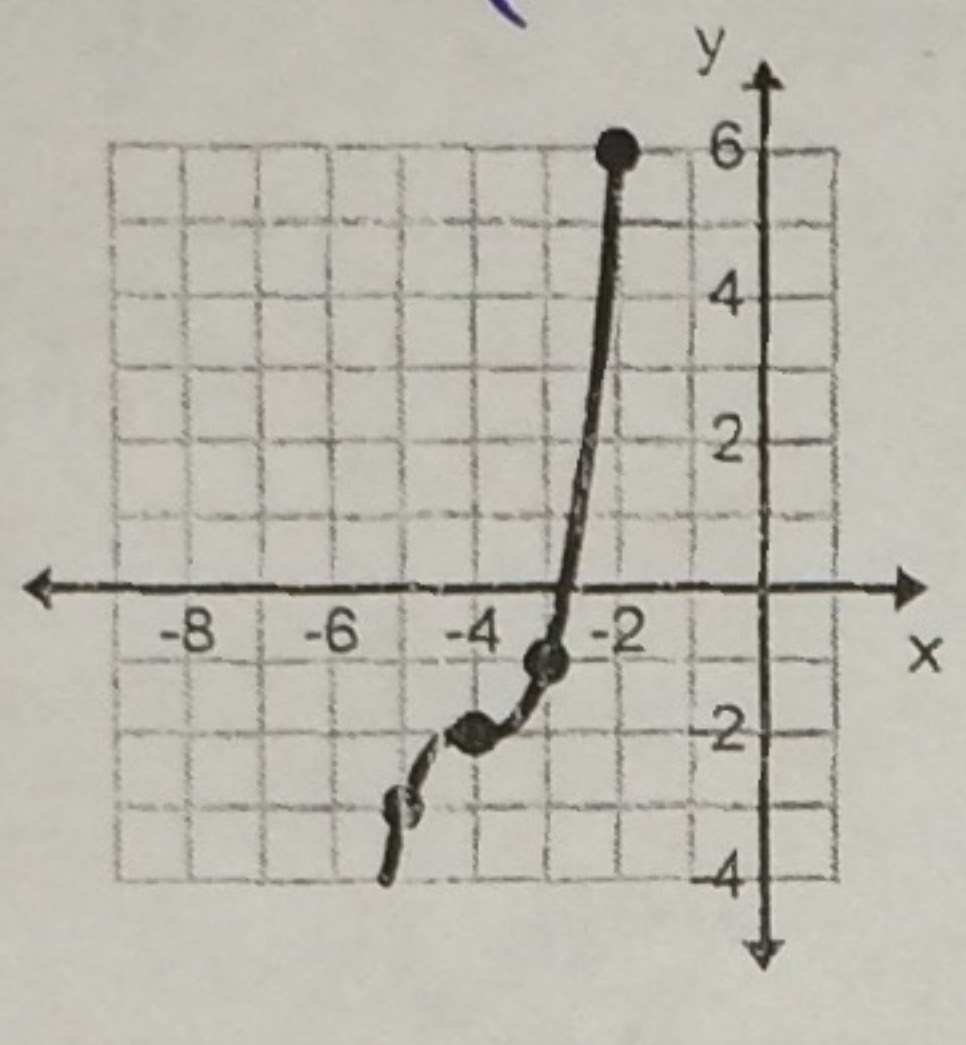
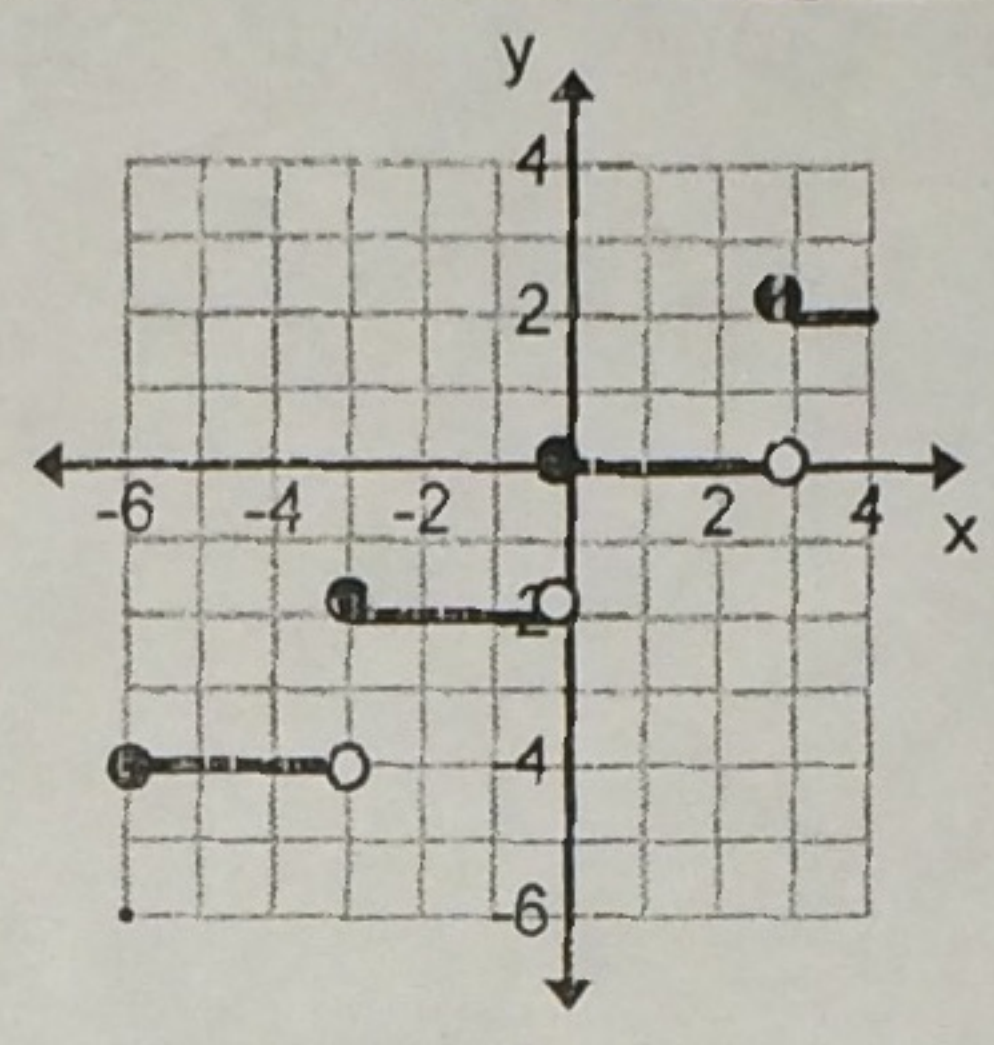
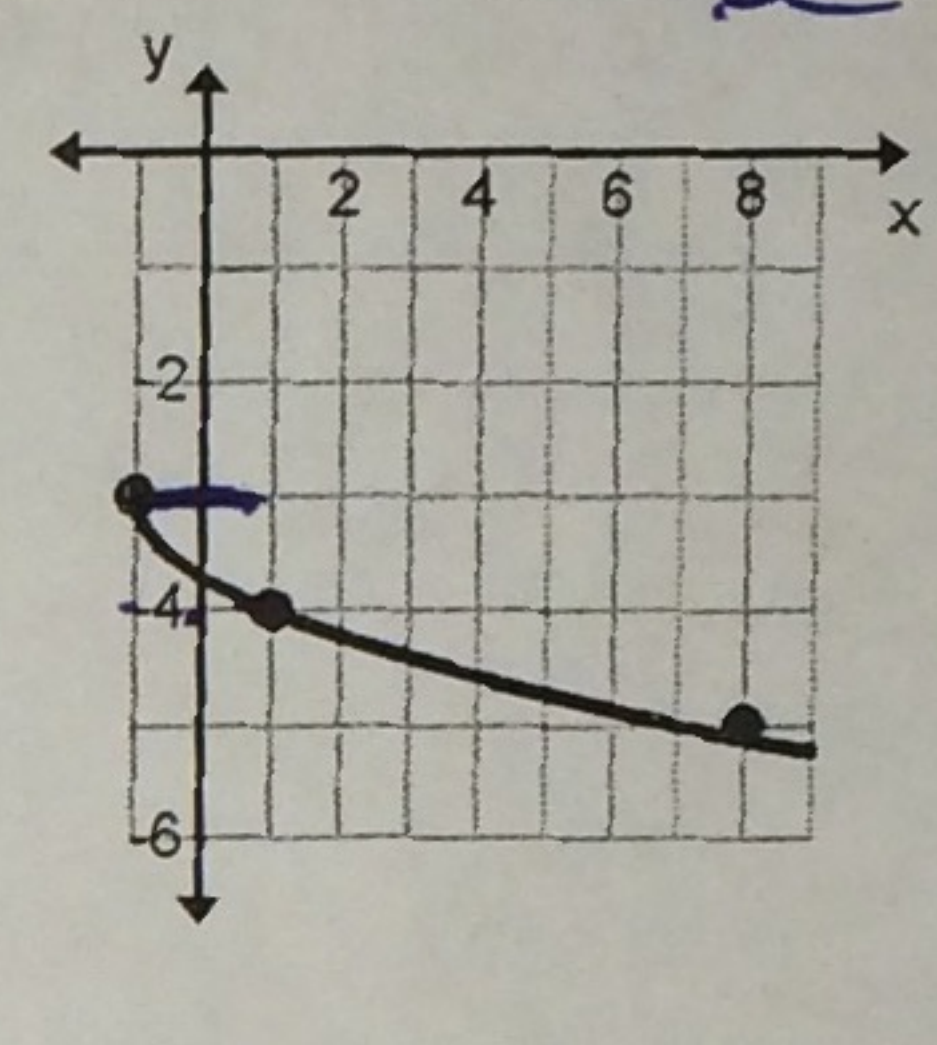
SHOW ALL WORK

Test 1.1 Algebra II Again

A) Determine if the relation is a function or not and B) Give the Domain and Range in interval notation.

<p>1. $f(x) = 3x^2 + 4$ Function? <u>Yes</u> or No D: <u>\mathbb{R}</u> R: <u>$[4, \infty)$</u></p> 	<p>2. Function? <u>Yes</u> or No D: <u>$[-5, 5)$</u> R: <u>$[-5, 4]$</u></p> 	<p>3. Function? <u>Yes</u> or No D: <u>$(-\infty, 2]$</u> R: <u>\mathbb{R}</u></p> 
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Write a possible equation for each graph.

<p>4. $f(x) = -2 x-2 + 3$</p> 	<p>5. $f(x) = (x+4)^3 - 2$</p> 	<p>6. $f(x) = 2\lfloor \frac{1}{3}x \rfloor$</p> 	<p>7. $f(x) = -\sqrt{\frac{1}{2}(x+1)} - 3$</p> 
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Solve each equation. Show all work.

<p>9. $2(x+1) - 3(x+4) = 3x+2$ $2x+2 - 3x-12 = 3x+2$ $-x-10 = 3x+2$ $-4x = +12$ $x = -3$</p>	<p>10. $x^2 + 11x + 30 = 0$ $(x+5)(x+6) = 0$ $x = -5 \text{ OR } -6$</p>	<p>11. $3x^2 + 11x + 6 = 0$ $(x+3)(3x+2) = 0$ $x = -3 \text{ OR } -\frac{2}{3}$</p>
<p>12. $x^2 - 9x = 0$ $x(x-9) = 0$ $x = 0 \text{ OR } x = 9$</p>	<p>13. $\sqrt{x+3} = 4$ $x+3 = 16$ $x = 13$</p>	<p>14. $(x-3)^2 = 5$ $x-3 = \pm\sqrt{5}$ $x = 3 \pm \sqrt{5}$</p>

Using the given functions, evaluate the following...

<p>$f(x) = 3 - x^2$ $g(x) = \lfloor x - 2 \rfloor$ $j(x) = 5x - 2$ $h(x) = \begin{cases} \lfloor x \rfloor - 4, & x < -1 \\ -3x, & -1 \leq x \leq 1 \\ (x+1)^2, & x > 1 \end{cases}$</p>	<p>15. $g(-2.7) = \lfloor -2.7 - 2 \rfloor$ $= \lfloor -4.7 \rfloor$ $= -5$</p>	<p>16. $f(-5) = 3 - (-5)^2$ $= 3 - 25$ $= -22$</p>	<p>17. $[j(x)]^2$ $= (5x-2)^2$ $= 25x^2 - 20x + 4$</p>
	<p>18. $f(x) - j(x)$ $3 - x^2 - (5x - 2)$ $3 - x^2 - 5x + 2$ $-x^2 - 5x + 5$</p>	<p>19. $f(j(x))$ $f(5x-2) = 3 - (5x-2)^2$ $= 3 - (25x^2 - 20x + 4)$ $= -25x^2 + 20x - 1$</p>	<p>20. $j^{-1}(x)$ $x = 5y - 2$ $\frac{x+2}{5} = f^{-1}(x)$ $\frac{x+2}{5}$</p>

Test 1.2 Intro to Trig NO CALCULATOR

Give the exact simplified value. I want to see a right triangle in the correct quadrant (or correct axis) for each.

21. $\sin \frac{2\pi}{3}$ $\frac{\sqrt{3}}{2}$	22. $\tan 210^\circ$ $\frac{\sqrt{3}}{3}$	23. $\cos \frac{11\pi}{6}$ $\frac{\sqrt{3}}{2}$	24. $\sec \left(\frac{-5\pi}{2}\right)$ undefined	25. $\sec 240^\circ$ -2
26. $\cos \frac{7\pi}{4}$ $\frac{\sqrt{2}}{2}$	27. $\sin \pi$ 0	28. $\tan(-270^\circ)$ undefined	29. $\cos \left(\frac{-\pi}{2}\right)$ 0	

Find the angle measure(s) for θ that make the statement true where $0^\circ \leq \theta < 360^\circ$ (DEGREES) (No Calculator)

30. $\sin \theta = \frac{-1}{2}$ 210°, 330°	31. $\tan \theta$ is undefined 90°, 270°	32. $\cos \theta = -\frac{\sqrt{3}}{2}$ 150°, 210°
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CALCULATORS ARE ALLOWED NOW!!

Determine which angles, if any, are NOT co-terminal angles to θ . MAINTAIN THE SAME UNIT.

33. $\theta = 215^\circ \pm 360$ -145° -865° 935° -215° -35°	34. $\frac{5\pi}{7}$ $\frac{19\pi}{7}$ $\frac{-9\pi}{7}$ $\frac{14\pi}{7}$ $\frac{33\pi}{7}$ $\frac{-2\pi}{7}$ $\frac{-16\pi}{7}$ $\frac{5\pi}{7}$
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Find x.

35. $\tan 43^\circ = \frac{7}{x}$ $x = \frac{7}{\tan 43^\circ}$	36. $\sin x^\circ = \frac{36}{45}$ $x = \sin^{-1} \frac{36}{45}$	37. Bobby is on top of a 212 foot canyon. He sees his sister Rhonda at the bottom of the other side of the canyon, at an angle of depression of 23°. How wide is the canyon? $\tan 23^\circ = \frac{x}{212}$ $x = 212 \tan 23^\circ$
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State the quadrant(s) or axis in which θ terminates based on the given information.

38. $\tan \theta < 0$ and $\cos \theta > 0$ IV	39. $\sin \theta > 0$ and $\sec \theta > 0$ I	 $\sin \theta = \frac{15}{17}$ $\csc \theta = \frac{17}{15}$ $\cos \theta = \frac{-8}{17}$ $\sec \theta = \frac{-17}{8}$ $\tan \theta = \frac{-15}{8}$ $\cot \theta = \frac{-8}{15}$
40. $\sin \theta = 0$ x-axis	41. $\sec \theta < 0$ and $\tan \theta > 0$ III	