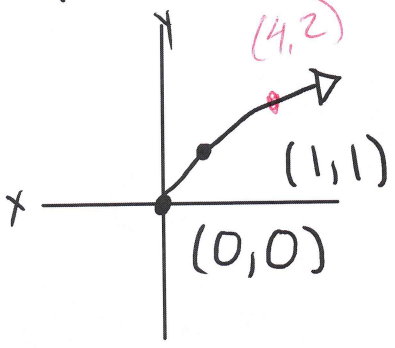
MAT 1340

Brooklyn Hoskins

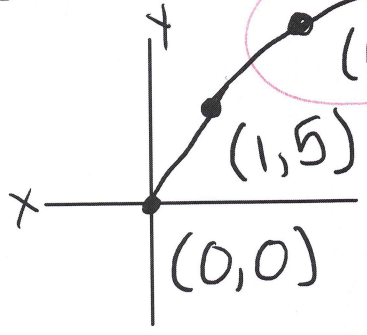
45/50 nice!

1. $g(x) = 5\sqrt{3x-21} - 2$

① $\sqrt{x}$

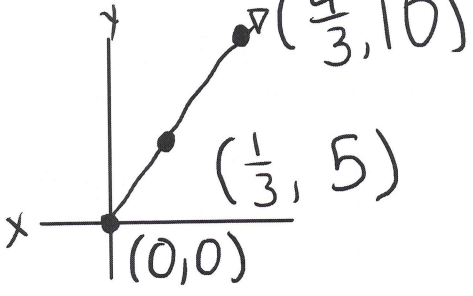


② $5\sqrt{x}$

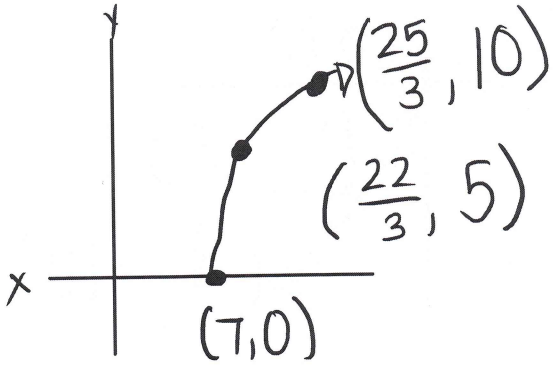


have to show this in step ① as (4,2)

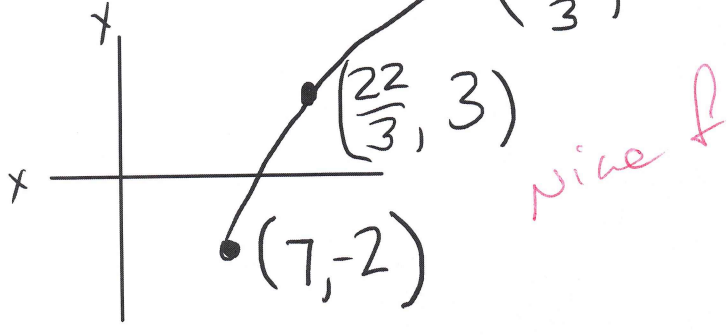
③ $5\sqrt{3x}$



④ $5\sqrt{3x-21} = 5\sqrt{3(x-7)}$



⑤ $5\sqrt{3(x-7)} - 2$



nice finish!

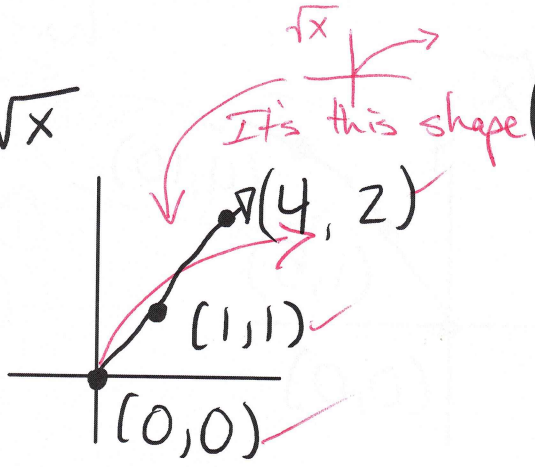
+4.5

MAT 1340

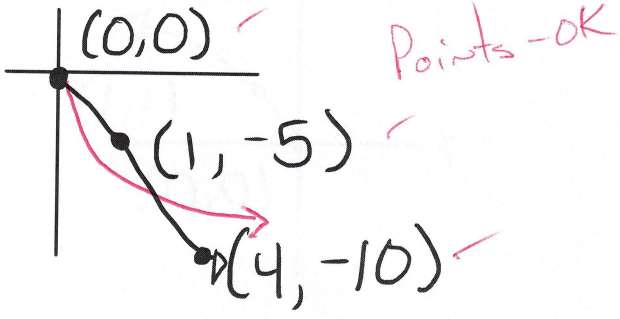
Brooklyn Hoskins

2. $g(x) = -5\sqrt{3x-21} + 2$

① $\sqrt{x}$

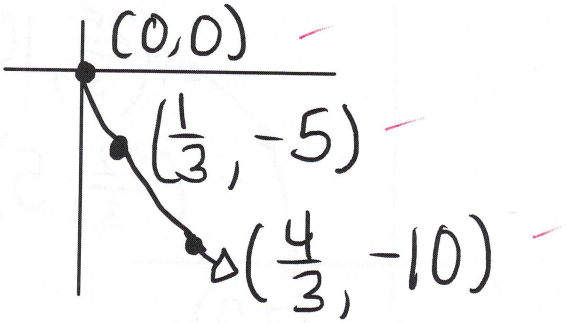


② $-5\sqrt{x}$

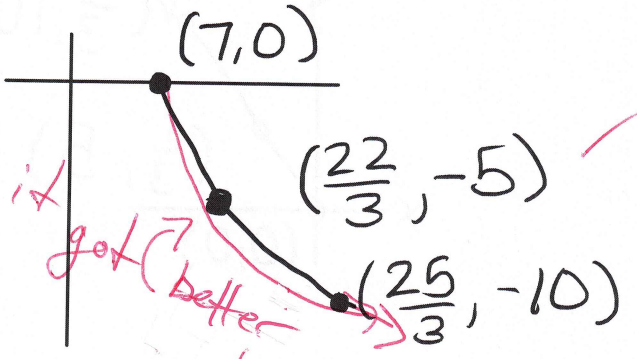


Points - OK

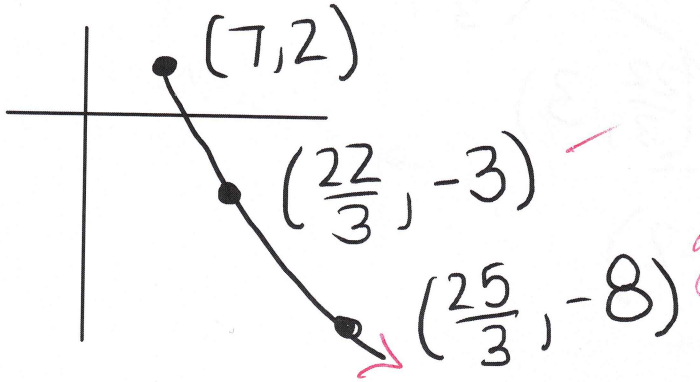
③ $-5\sqrt{3x}$



④ $-5\sqrt{3x-21} = -5\sqrt{3(x-7)}$



⑤ $5\sqrt{3(x-7)} + 2$



good finish!

+4.5

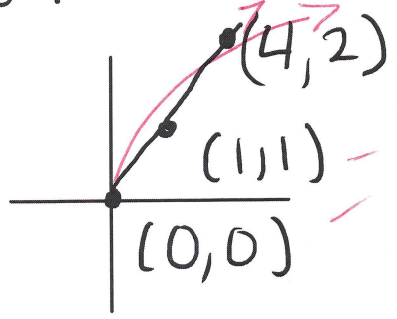
MAT 1340

Brooklyn Hoskins

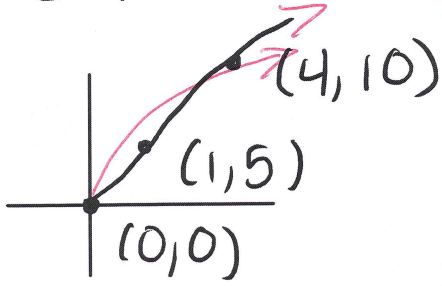
3. $g(x) = 5\sqrt{-3x-21} - 11$

Tip: Draw the curve first, then put your points on it. ☺

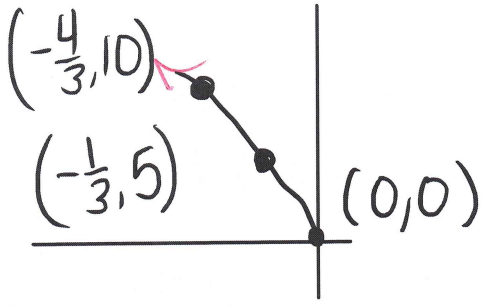
① $\sqrt{x}$



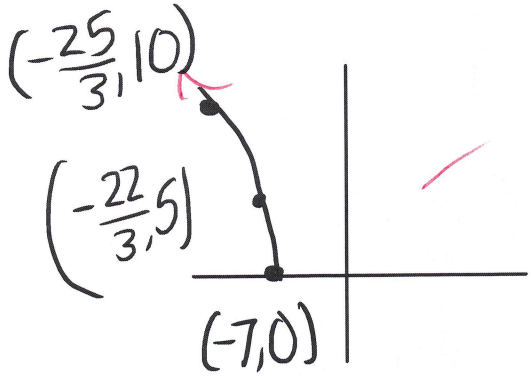
② $5\sqrt{x}$



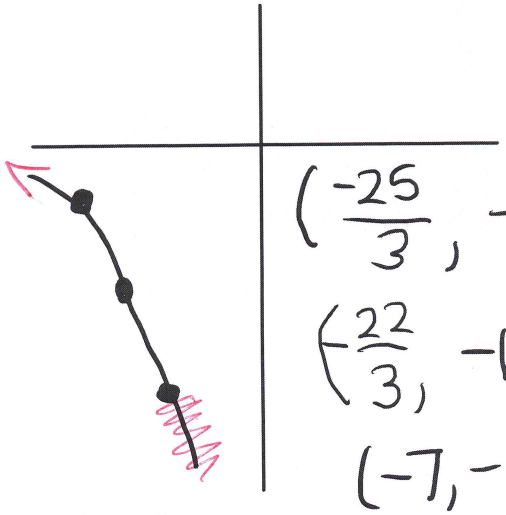
③ $5\sqrt{-3x}$



④ $5\sqrt{-3x-21} = 5\sqrt{-3(x+7)}$



④ $5\sqrt{-3(x+7)} - 11$



+4.5

MAT1340

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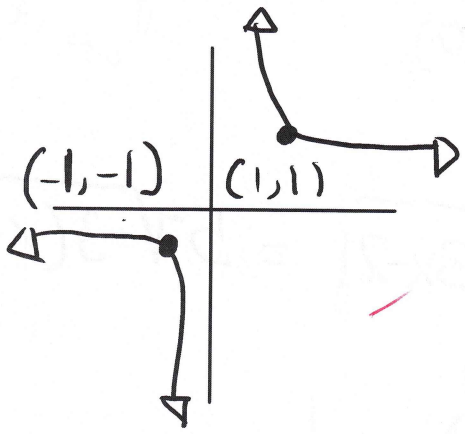
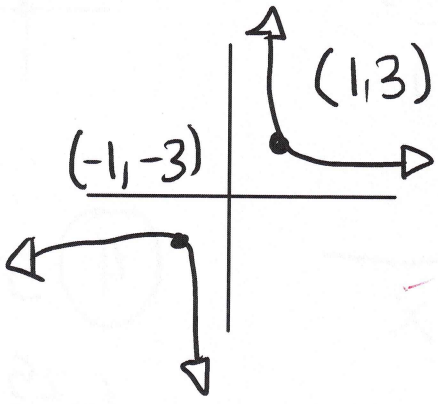
4. $g(x) = \frac{3}{(-2x+8)^3} + 5 = 3\left(\frac{1}{(-2(x-4))^3}\right) + 5$

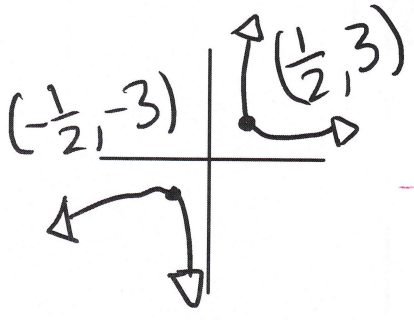
① $\frac{1}{x^3}$



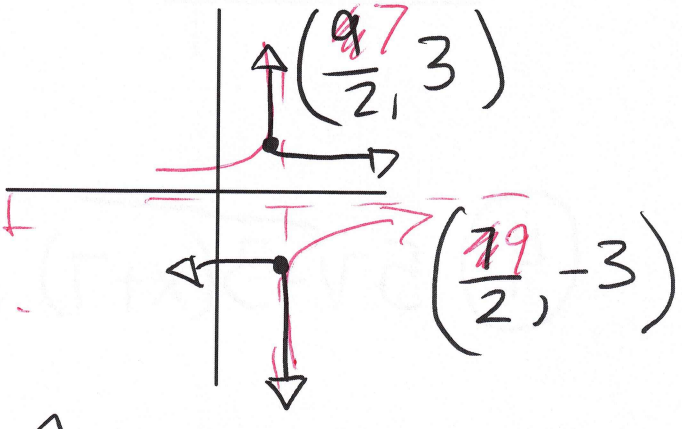
② $3\left(\frac{1}{x^3}\right)$



③ $3\left(\frac{1}{(2x)^3}\right)$

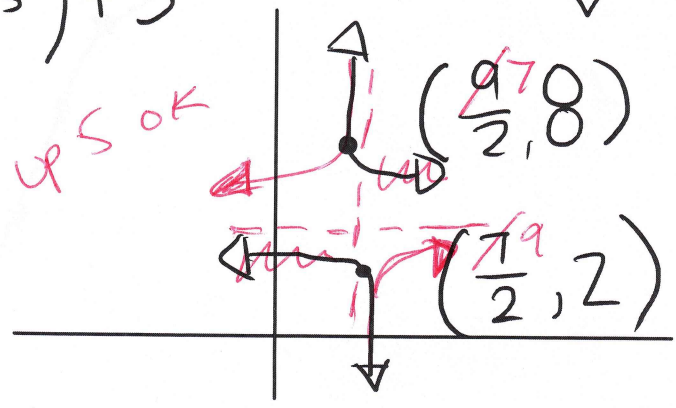


④ $3\left(\frac{1}{-2(x-4)}\right)^3$



The whole thing flips, not just the x's.

⑤ $3\left(\frac{1}{(-2(x-4))^3}\right) + 5$



ups ok

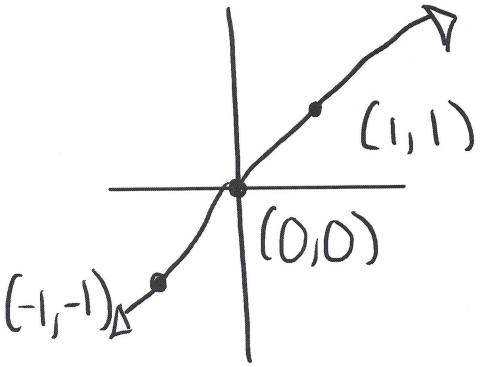
+4

MAT 1340

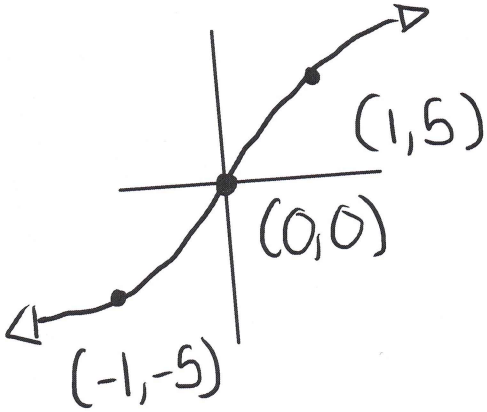
Brooklyn Hoskins

5. $g(x) = 5\sqrt[5]{3x+21} - 6$

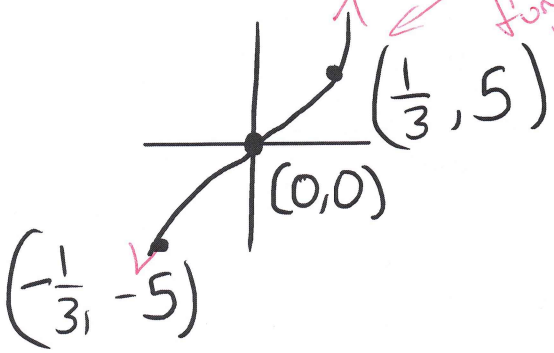
① $\sqrt[5]{x}$



② $5\sqrt[5]{x}$

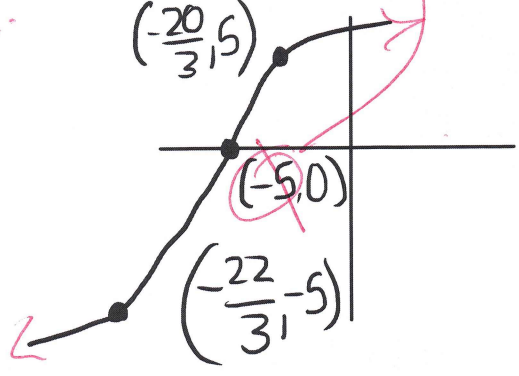


③ $5\sqrt[5]{3x}$

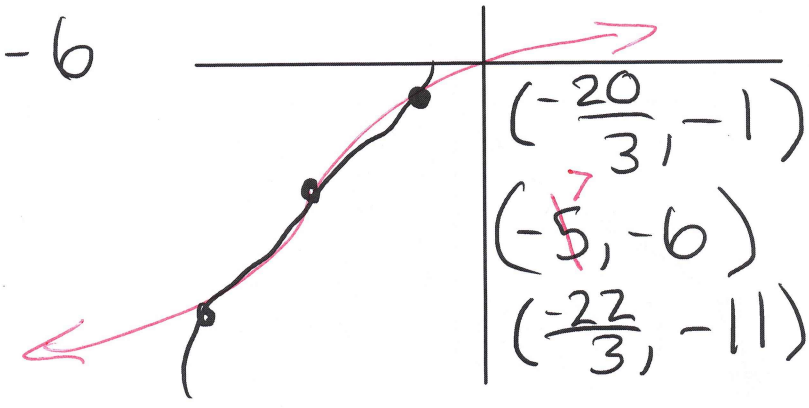


④ $5\sqrt[5]{3(x+7)}$

different function here.



⑤ $5\sqrt[5]{3x+21} - 6$



+4

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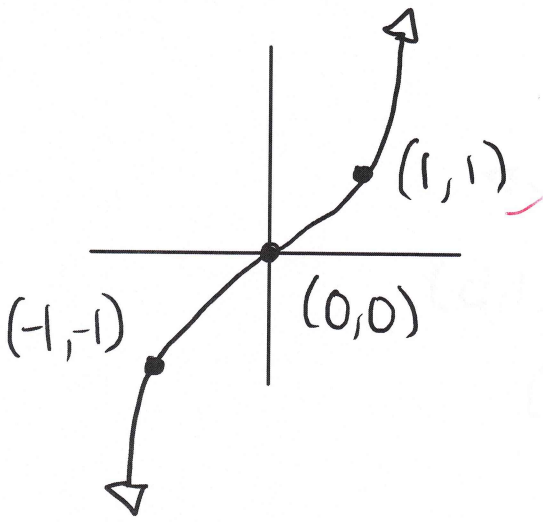
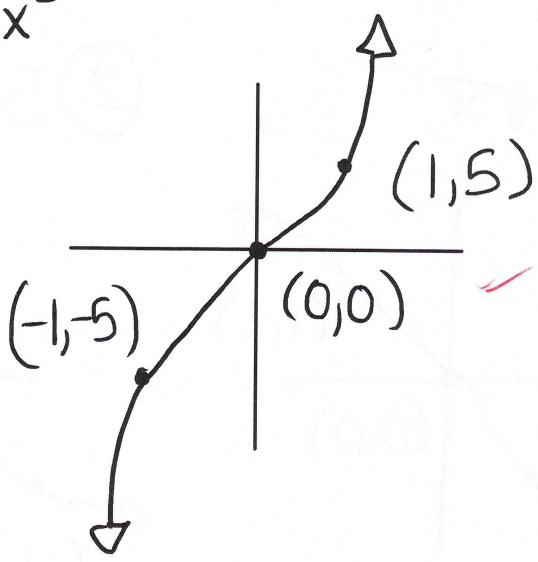
6. $g(x) = 5(3x+21)^5 - 6$

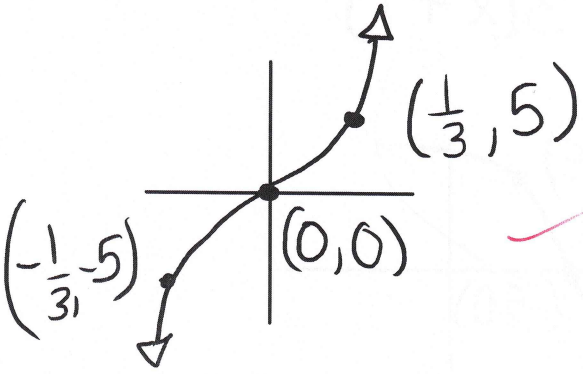
① x^5



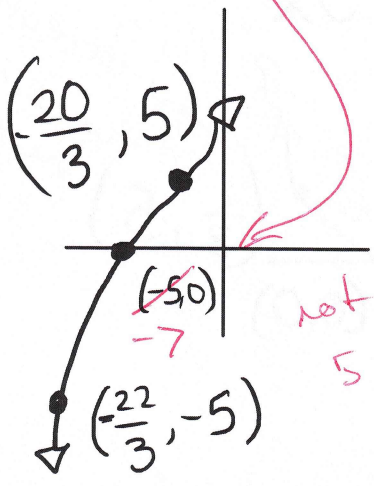
② $5x^5$



③ $5(3x)^5$

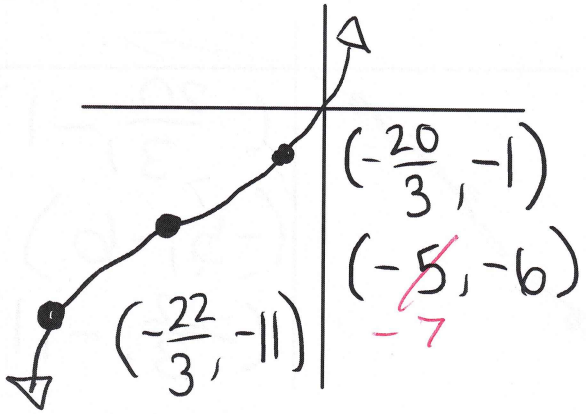


④ $5(3(x+7))^5$



not sure where 5 came from...

⑤ $5(3x+21)^5 - 6$



+4.5

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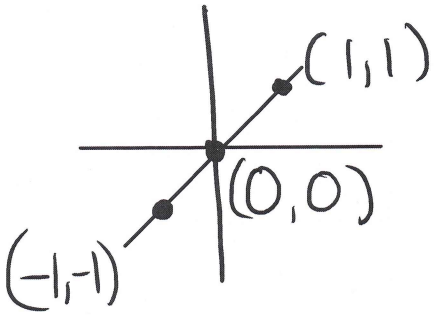
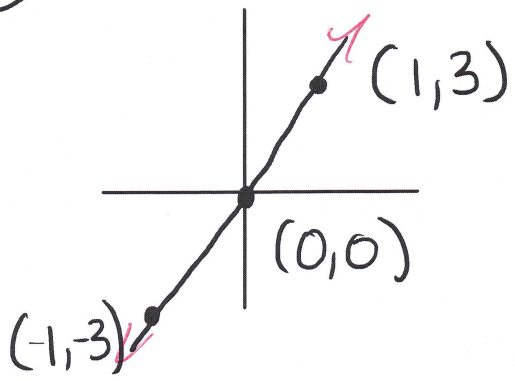
7. $g(x) = 3(x+5)-7$

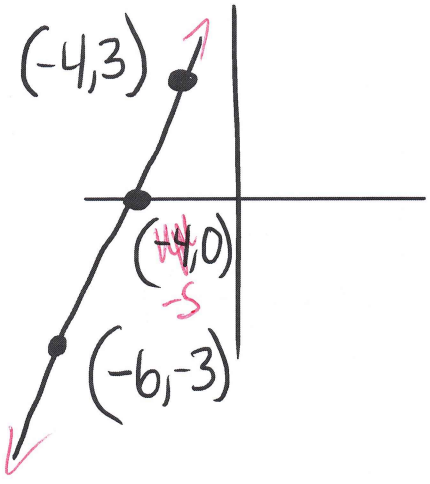
① x



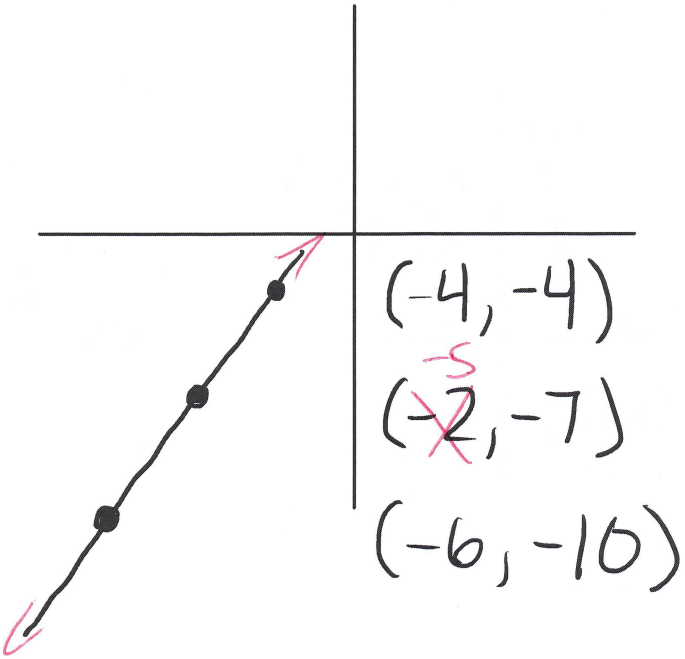
② $3x$



③ $3(x+5)$



④ $3(x+5)-7$



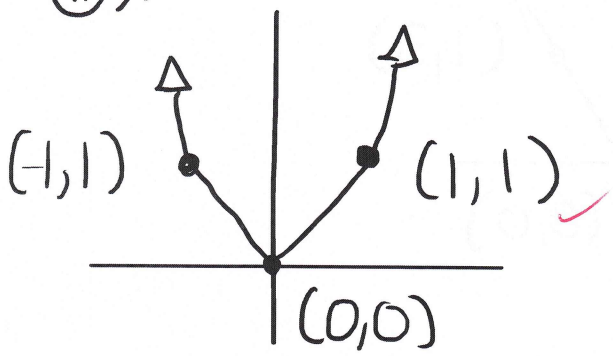
+4.5

MAT 1340

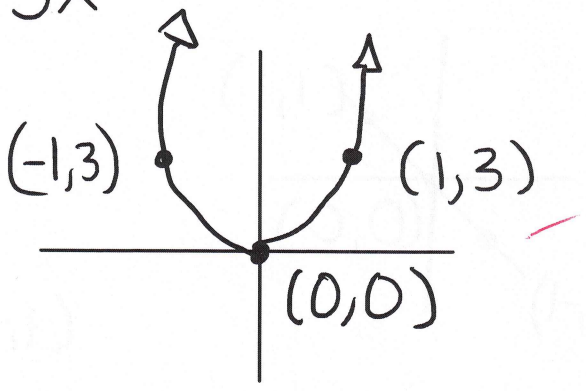
Brooklyn Hoskins

8. $g(x)=3(x+5)^2-7$

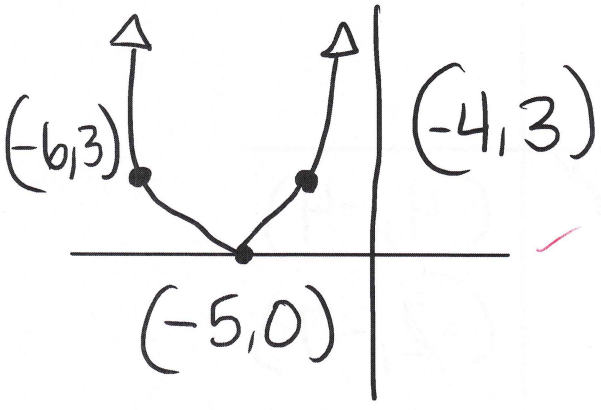
1. x^2



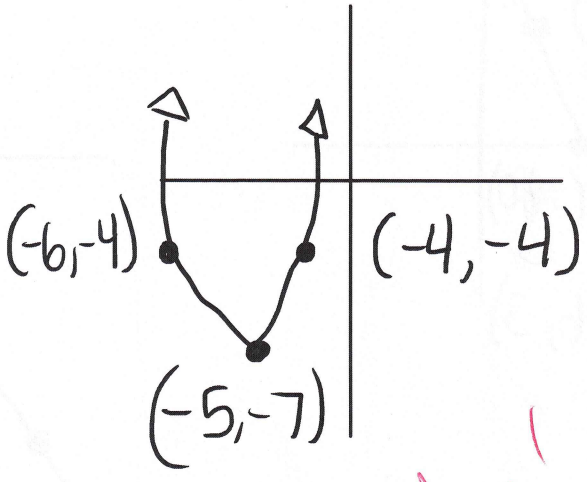
2. $3x^2$



3. $3(x+5)^2$



4. $3(x+5)^2-7$



Nice!

+5

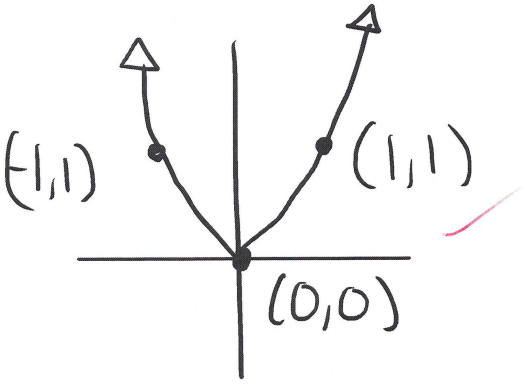
MAT1340

Brooklyn Hoskins

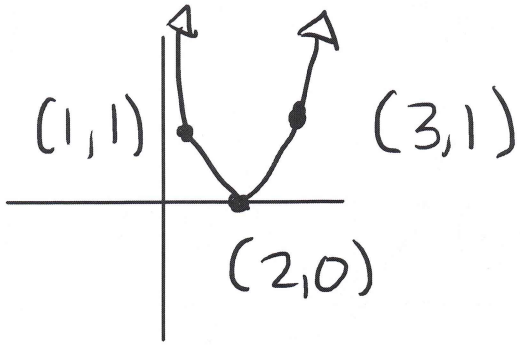
9 $g(x) = x^2 - 4x - 7$

$(x-2)^2 - 11$ ← show how would be nice, but OK

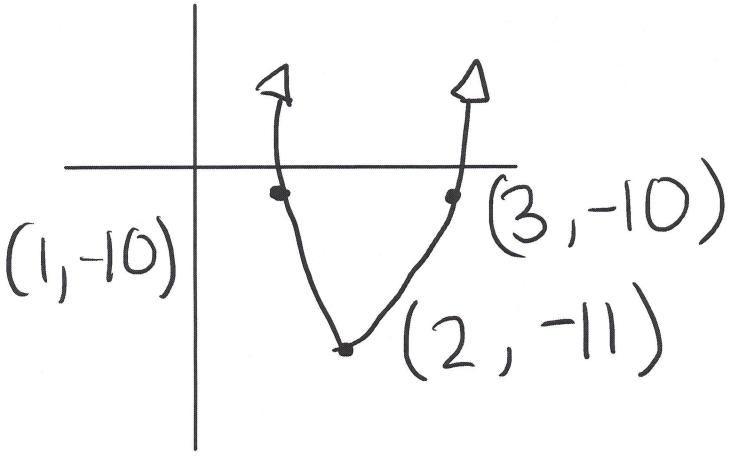
1. x^2



2. $(x-2)^2$



3. $(x-2)^2 - 11$



+5

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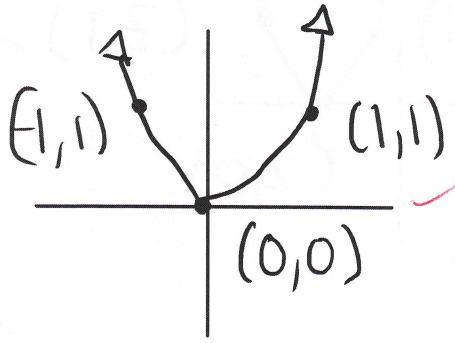
10. $g(x) = 4x^2 + 5x + 17$

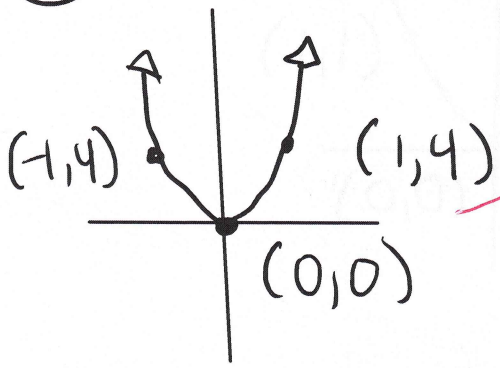
$4\left(x + \frac{5}{2(4)}\right)^2 + \left(17 - \frac{5^2}{4(4)}\right)$

$4\left(x + \frac{5}{8}\right)^2 + \frac{247}{16}$

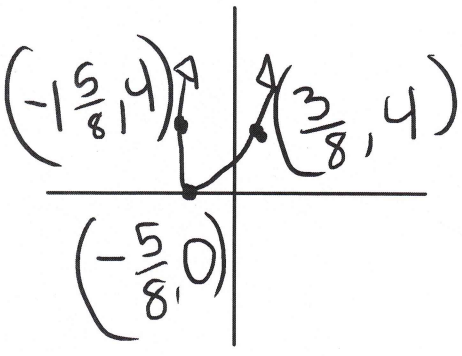
1. x^2



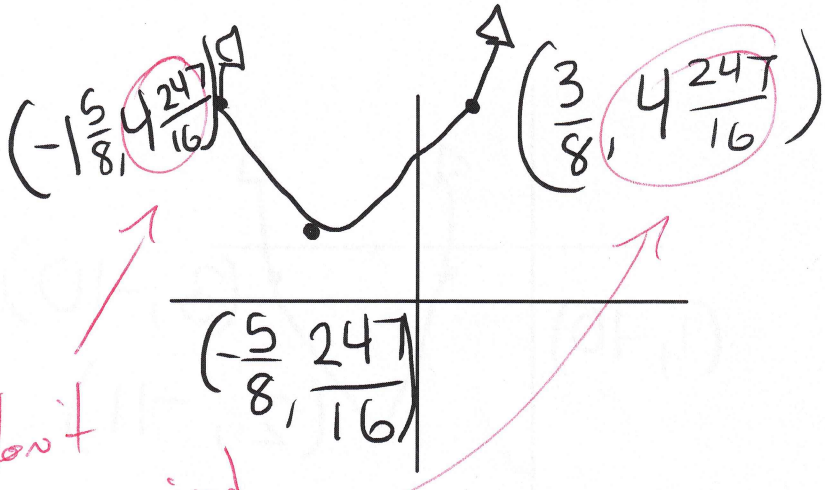
2. $4x^2$



3. $4\left(x + \frac{5}{8}\right)^2$



4. $4\left(x + \frac{5}{8}\right)^2 + \frac{247}{16}$



don't leave mixed fractions.

+4.5