Exam 3

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| y > |x-1| + 3

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A. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/answera.png*

B. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/answerb.png*

C. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/answerc.png*

D. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/answerd.png |
| Question 2 of 200.0/ 5.0 PointsThe function f(x) = -6x.  The graph of g(x) is f(x)vertically stretched by a factor of 7 and reflected in the *x*-axis.  What is the function rule for g(x)?

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A. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Revision%20B/Exam%20Images/Algebra%20II%20Part%20I%20Exam%20Image%201.JPG*

B.  g(x) = -42x*

C. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Revision%20B/Exam%20Images/Algebra%20II%20Part%20I%20Exam%20Image%202.JPG*

D.  g(x) = 42x

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| Feedback:Please refer to: Lesson 2-6, p. 102, Example Problem 4, Problems 26-29  |
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| Question 3 of 205.0/ 5.0 PointsWhat is the graph of the inequality?4x + 2y ≤ 6

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A. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/answer%20a.png*

B. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/answer%20b.png*

C. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/answer%20c.png*

D. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/answer%20d.png

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| Feedback:Great job! |
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| Question 4 of 205.0/ 5.0 PointsThe function *f*(*x*) is represented by the table below. What are the corresponding values of *g*(*x*) for the transformation *g*(*x*) = 6*f*(*x*)?

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| ***x*** | ***f*** **(*x*)** |
| –7 | 8 |
| –3 | 3 |
| 0 | –1 |
| 2 | 7 |
| 10 | 5 |

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A. x         g(x)https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image064.jpg*

B. x          g(x)https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image065.jpg*

C. x          g(x)https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image066.jpg*

D. x         g(x)https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image067.jpg

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| Feedback:Great job! |
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| Question 5 of 205.0/ 5.0 PointsWrite an equation for the following transformation of y = x: a vertical compression by a factor of https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Revision%20B/Exam%20Images/Algebra%20II%20Part%20I%20Exam%20Image%203.JPG

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A. y = -4x*

B. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Revision%20B/Exam%20Images/Algebra%20II%20Part%20I%20Exam%20Image%204.JPG*

C. y = 4x*

D. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Revision%20B/Exam%20Images/Algebra%20II%20Part%20I%20Exam%20Image%205.JPG

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| Feedback:Great job! |
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| Question 6 of 205.0/ 5.0 PointsLet g(*x*) be the reflection of f(*x*) = *x*2 +3 in the x-axis. What is the function rule for g(*x*)?

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A. g(*x*) = -*x*2 - 3*

B. g(*x*) = -*x*2 + 3*

C. g(*x*) = *x*2 - 3*

D. g(*x*) = *x*2 + 3 |
| Question 7 of 200.0/ 5.0 PointsWhat is the graph of the inequality?-3*y* ≥ 6*x* -3

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A. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image084.jpg*

B. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image085.jpg*

C. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image086.jpg*

D. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image087.jpg |
| Question 8 of 200.0/ 5.0 PointsFind the function rule for g(x). The function *f(x) = x2*  . The graph of g(x) is f(x) translated to the right 8 units and down 7 units. What is the function rule for g(x)?

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A. g(x) = (x + 7)2+ 8*

B. g(x) = (x - 7)2- 8*

C. g(x) = (x + 8)2+ 7*

D. g(x) = (x - 8)2- 7 |
| Question 9 of 205.0/ 5.0 PointsIf a function, *f(x)*is shifted to the left 4 unit(s), what function represents the transformation?

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A. f(x) + 4*

B. f(x) - 4*

C. f(x-4)*

D. f(x+4)

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| Feedback:Great job! |
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| Question 10 of 205.0/ 5.0 PointsWhich answer choice represents:y ≥ |x+2| + 5

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A. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/choice%20a.png*

B. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/choice%20b.png*

C. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/choice%20c.png*

D. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/choice%20d.png |
| Question 11 of 200.0/ 5.0 PointsThe graph shows the projected altitude f(x) (in thousands of feet) of an airplane scheduled to depart an airport at noon. If the plan leaves two hour(s) late, what function represents this transformation?https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/Alg2exam3_1.png

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A. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/Alg2exam3_2.png*

B. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/Alg2exam3_3.png*

C. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/Alg2exam3_4.png*

D. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/Alg2exam3_5.png

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| Feedback:Please refer to: Lesson 2-6, p. 100, Example Problem 2, Problems 19-25 |
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| Question 12 of 200.0/ 5.0 PointsWrite an inequality for the graph.https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image092.jpg

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A. y ≤ |x – 5| – 5*

B. y ≥ |x – 5| + 5*

C. y ≤ |x + 5| + 5*

D. y ≤ |x – 5| + 5 |
| Question 13 of 200.0/ 5.0 PointsWhat transformations change the graph of *f(x)* to the graph of *g(x)*?f(x) = 3x2g(x) = 9x2 - 4

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A. The graph of *g(x)* is the graph of *f(x)* stretched vertically by a factor of 3 and translated up 4 units. *

B. The graph of *g(x)* is the graph of *f(x)* stretched vertically by a factor of 1/3 and translated up 4 units.*

C. The graph of *g(x)* is the graph of *f(x)* stretched vertically by a factor of 3 and translated down 4 units.*

D. The graph of *g(x)* is the graph of *f(x)* stretched vertically by a factor of 1/3 and translated down 4 units.

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| Feedback:Please refer to: Lesson 2-6, p. 103, Example Problem 5, Problems 30-33 |
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| Question 14 of 200.0/ 5.0 PointsWhat is the graph of the absolute value inequality?|x + 5| ≥ y – 2

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A. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image088.jpg*

B. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image089.jpg*

C. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image090.jpg*

D. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image091.jpg |
| Question 15 of 205.0/ 5.0 PointsWhat is the graph of y = x - 3 (shown below) translated up 2 units?https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/alg2exam3_a.png

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A. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/alg2exam3_d.png*

B. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/alg2exam3_c.png*

C. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/alg2exam3_e.png*

D. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/alg2exam3_b.png

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| Feedback:Great job! |
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| Question 16 of 205.0/ 5.0 PointsThe function *f*(*x*) = *x*2. The graph of *g*(*x*) is *f*(*x*) translated to the left 6 units and down 5 units. What is the function rule for *g*(*x*)?

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A. *g*(*x*) = (*x* + 6)2 - 5*

B. *g*(*x*) = (*x* - 5)2 + 6*

C. *g*(*x*) = (*x* - 6)2 + 5*

D. *g*(*x*) = (*x* + 5)2 - 6 |
| Question 17 of 200.0/ 5.0 PointsWhat transformations change the graph of *f(x)* to the graph of *g(x)*? f(x) = x2      g(x) = (x+5)2 - 9

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A. The graph of *g(x)* is the graph of *f(x)* translated to the left 5 units and down 9 units.*

B. The graph of g(x) is the graph of f(x) translated to up 5 units and right 9 units.*

C. The graph of g(x) is the graph of f(x) translated to down 5 units and left 9 units.*

D. The graph of g(x) is the graph of f(x) translated to the right 5 units and up 9 units.

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| Feedback:Please refer to: Lesson 2-6, p. 103, Example Problem 5, Problems 30-33 |
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| Question 18 of 200.0/ 5.0 Pointshttps://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/questionimage.pngWrite the inequality for the graph above.

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A. -3x - 4y > 12*

B. -3x - 4y < 12*

C. -4x - 3y > 12*

D. -4x - 3y < 12 |
| Question 19 of 205.0/ 5.0 PointsAn electronics store makes a profit of $33 for every portable DVD player sold and $88 for every DVD recorder sold. The manager’s target is to make at least $264 a day on sales of the portable DVD players and DVD recorders. Write and graph an inequality that represents the number of both kinds of DVD players that can be sold to reach or beat the sales target. Let *p*represent the number of portable DVD players and *r* represent the number of DVD recorders.

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A. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image%20a.png33p + 88r ≥ 264*

B. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image%20b.png 33p + 88r ≥ 264*

C. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image%20c.png 33p + 88r ≥ 264*

D. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_2_files/image%20d.png 33p + 88r ≥ 264

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| Feedback:Great job! |
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| Question 20 of 205.0/ 5.0 PointsWhich of the following describes the translation of y = |x| to y = |x + 7| - 2

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A. y = |x|translated 2 units to the left and 7 units down*

B. y = |x|translated 7 units to the right and 7 units down*

C. y = |x|translated 2 units to the right and 7 units up*

D. y = |x|translated 7 units to the left and 2 units down |