Exam 6

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| What is the inverse of the given function? y = 3x + 9

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A. y= 3x­-3*

B.  y=3x+3*

C. y = 1/3x + 3*

D.  y=1/3x­-3 |
| Question 2 of 200.0/ 5.0 PointsIs relation *t*a function?  Is the inverse of relations*t* a function?Relation *t*

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| ***x*** | 0 | 1 | 2 | 3 |
| ***﻿﻿y*** | -2 | 1 | 10 | 2 |

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A. Relation*t* is not a function.  The inverse of relation *t*is not a function.*

B. Relation *t* is not a function.  The inverse of relation *t* is not a function.*

C. Relation *t* is not a function.  The inverse of relation *t* is a function.*

D. Relation *t* is a function.  The inverse of relation*t* is a function. |
| Question 3 of 200.0/ 5.0 PointsWhat is the inverse of the given relation?*y* = 4*x* - 8

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A. *y* = 4*x* - 2*

B. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Additional%20Exam%20Question%20Images/Exam%206.1%20image%202.JPG*

C. *y* = 4*x*+ 2*

D. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Additional%20Exam%20Question%20Images/Exam%206.1%20image%203.JPG |
| Question 4 of 200.0/ 5.0 PointsLet f(x) = -5x - 4 and g(x) = 6x - 7. Find f(x) + g(x)

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A. -11x = 3b*

B. x - 11*

C. x + 3*

D. -11x - 11

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| Feedback:Please refer to: Lesson 6-6. Example 1 |
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| Question 5 of 200.0/ 5.0 PointsLet f(x) = x2 + 6 and 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%2017.JPG . Find ( g o f)(­ -7)

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A. 63 55*

B. -57   7*

C. 384   7*

D. 295  49 |
| Question 6 of 200.0/ 5.0 PointsA store is offering a 25% discount on all items.  Also, employees get a 10% employee discount.  If you are an employee which discount would you want to be applied first to save the most money?

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A.  25%*

B. 10% *

C. It doesn’t matter which discount is applied first, the result is the same.*

D.  Not enough information is given |
| Question 7 of 200.0/ 5.0 PointsGraph y = -­4x2 ­- 2 and its inverse.

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A. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_6_files/new%20images/14.c.jpg*

B. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_6_files/new%20images/14.d.jpg*

C. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_6_files/new%20images/14.b.jpg*

D. https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Algebra2_Exam_6_files/new%20images/14.a.jpg |
| Question 8 of 200.0/ 5.0 PointsLet f(x) = -­2x ­- 7 and g(x) = ­-4x + 3. Find (f o g)(-­5)

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A. -9*

B. 23*

C. 3*

D. -53 |
| Question 9 of 200.0/ 5.0 PointsLet f(x) = 3x ­- 6 and g(x) = x ­- 2. Find 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%206.JPG and its domain

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A.  3; all real numbers except x = 2*

B.  3; all real numbers*

C.  ­3; all real numbers except x = 3*

D. 1; all real numbers |
| Question 10 of 200.0/ 5.0 PointsFor the function f(x) = x + 9, find (f o f-1)(5)

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A. 5*

B. 25*

C. 14*

D. -5 |
| Question 11 of 200.0/ 5.0 PointsWhat is the inverse of the given function? y = 7x2 -­ 3.

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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%2010.JPG*

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%207.JPG*

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%208.JPG*

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%209.JPG |
| Question 12 of 200.0/ 5.0 PointsLet *f(x*) = -3*x* - 4 and *g*(*x*) = 2*x*- 6. Find https://study.ashworthcollege.edu/access/content/group/59841a3a-ae83-40e0-9ad2-cdbb53b336a0/Algebra%20II%20Part%201/Additional%20Exam%20Question%20Images/Exam%206.1%20image%201.JPG

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A. 28*

B. -20*

C. 17*

D. 56 |
| Question 13 of 200.0/ 5.0 Pointsf(x) = x2 -­ 16 and g(x) = x+4. Find 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%206.JPG and its domain

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A. x ­- 4; all real numbers except x ≠ -4*

B. x -­ 4; all real numbers except x ≠ 4*

C. x + 4; all real numbers except x ≠ 4*

D. x +­ 4; all real numbers except x ≠ 4 |
| Question 14 of 200.0/ 5.0 PointsFor the function f(x) = (8-­2x)2 ,find f-­1 . Determine whether f­-1 is a function.

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A.  f­-1(x) = 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%2013.JPG; f­-1 is not a function*

B.  f­-1(x) = 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%2015.JPG;f­-1 is not a function*

C.  f­-1(x) = 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%2014.JPG;f­-1 is a function*

D.  f­-1(x) = 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%2012.JPG;f­-1 is a function |
| Question 15 of 200.0/ 5.0 PointsLet f(x) = x + 2 and g(x) = x2 Find ( g o f)(-­5)

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A. 9*

B. -10*

C. -3*

D. 49 |
| Question 16 of 200.0/ 5.0 Pointshttps://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%2016.JPG find f-1

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A. f­-1 (x) = x2 +25; y> 5*

B.  f­-1 (x) = x2 +25; y> 25*

C. f ­-1 (x) = (x + 5)2; y  > 5*

D.  f ­-1 (x) = x2 + 5; y >  5 |
| Question 17 of 200.0/ 5.0 PointsLet f(x) = 4x - 5 and g(x) = 6x - 3. Find f(x) - g(x).

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A. -2x - 8*

B. -2x - 2*

C. 2x + 5*

D. 2x - 5

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| Feedback:Please refer to: Lesson 6-6. Example 1 |
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| Question 18 of 205.0/ 5.0 PointsLet f(x) = 3x + 2 and g(x) =7x + 6. Find f ·g and its domain.

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A. 21x2 +32x + 12; all real numbers except x = -6/7*

B.  21x2 + 32x + 12; all real numbers *

C.  6x2 + 4x + 42; all real numbers *

D. 6x2 + 4x + 42; all real numbers except x = ­2/3

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| Feedback:Great job! |
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| Question 19 of 205.0/ 5.0 PointsFor the function f(x) = x2 ­ -12, find (f o f­-1)(4)

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A. 0*

B. 4*

C. 10*

D. 6 |
| Question 20 of 200.0/ 5.0 PointsIs relation t a function?  Is the inverse of relations t a function?Relation t

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| x | 0 | 2 | 4 | 6 |
| y | -8 | -7 | -4 | -4 |

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A.  Relation t is a function. The inverse of relation t is not a functions*

B.  Relation t is not a function.  The inverse of relation t is not a function.  *

C. Relation t is a function. The inverse of relation t is a function. *

D. Relation t is not a function. The inverse of relation t is a function |