

Online Exam 5_05

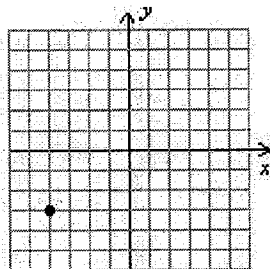
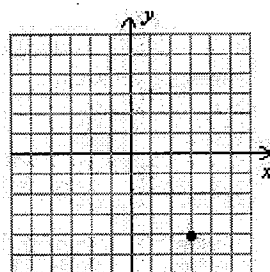
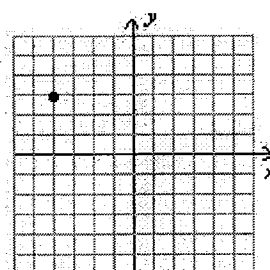
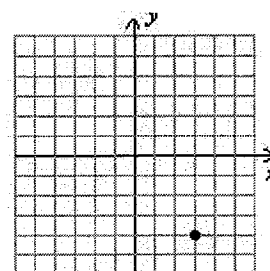
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Part 1 of 1 -

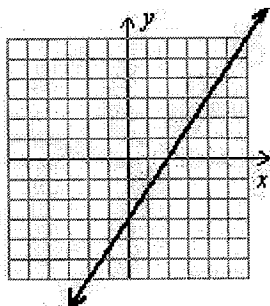
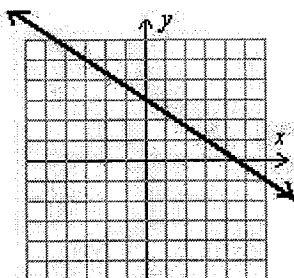
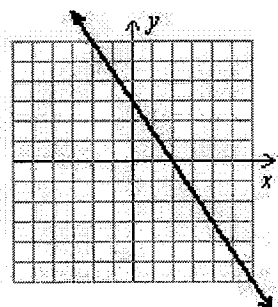
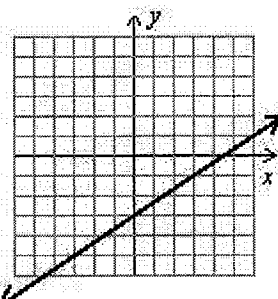
Question 1 of 20

5.0 Points

Plot the point $(-4, 3)$ in a rectangular coordinate system.☐ A.☐ B.☐ C.☐ D.[Reset Selection](#)☐ Mark for Review [What's This?](#)

5.0 Points

Question 2 of 20

Graph the line $3x + 2y = 6$.☐ A.☐ B.☐ C.☐ D.[Reset Selection](#)☐ Mark for Review [What's This?](#)

Question 3 of 20

5.0 Points

Test the equation for symmetry with respect to the x-axis, the y-axis, and the origin.

$$x^2 + y^2 + x^2y^2 = 4$$

- ☐ A. Symmetric with respect to the x-axis
- ☐ B. Symmetric with respect to the y-axis
- ☐ C. Symmetric with respect to the origin
- ☐ D. Symmetric with respect to the x-axis, the y-axis, and the origin

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Question 4 of 20

5.0 Points

Test the equation for symmetry with respect to the x-axis, the y-axis, and the origin.

$$x^2 + xy^2 + x = 2$$

- ☐ A. Symmetric with respect to the x-axis
- ☐ B. Symmetric with respect to the y-axis
- ☐ C. Symmetric with respect to the origin
- ☐ D. Symmetric with respect to the x-axis, the y-axis, and the origin

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Question 5 of 20

5.0 Points

Test the equation for symmetry with respect to the x-axis, the y-axis, and the origin.

$$x^2 + xy^2 + 2y = 1$$

- ☐ A. Symmetric with respect to the x-axis
- ☐ B. Symmetric with respect to the y-axis
- ☐ C. Symmetric with respect to the origin
- ☐ D. Not symmetric with respect to the x-axis, the y-axis, or the origin

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Question 6 of 20

5.0 Points

Find the distance between $(-6, 4)$ and $(0, -4)$.

- ☐ A. 6
- ☐ B. 2
- ☐ C. 10
- ☐ D. 4

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Question 7 of 20

5.0 Points

Find the midpoint of the line segment with endpoints $(-5, -5)$ and $(7, 9)$.

- ☐ A. $(2, 4)$
- ☐ B. $(-12, -14)$
- ☐ C. $(1, 2)$
- ☐ D. $(-6, -7)$

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Question 8 of 20

5.0 Points

Find the center and radius of the circle. $(x + 5)^2 + (y - 3)^2 = 49$.

- ☐ A. Center (5, -3) and radius 7
- ☐ B. Center (-5, 3) and radius 7
- ☐ C. Center (5, -3) and radius 49
- ☐ D. Center (-5, 3) and radius 49

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Question 9 of 20

5.0 Points

Find the center and radius of the circle.

$$3x^2 + 3y^2 - 18x + 6y - 162 = 0$$

- ☐ A. Center (3, -1) and radius 8
- ☐ B. Center (-3, 1) and radius 8
- ☐ C. Center (3, -1) and radius 64
- ☐ D. Center (-3, 1) and radius 64

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Question 10 of 20

5.0 Points

Find the equation of a circle with center (2, -3) and the graph of which contains the point (3, 4).

- ☐ A. $(x - 2)^2 + (y + 3)^2 = 50$
- ☐ B. $(x + 2)^2 + (y - 3)^2 = 50$
- ☐ C. $(x - 2)^2 + (y + 3)^2 = -50$
- ☐ D. $(x + 2)^2 + (y - 3)^2 = -50$

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Question 11 of 20

5.0 Points

Indicate the slope.

$$3x + 4y = 12$$

- ☐ A. -4/3
- ☐ B. 4/3
- ☐ C. -3/4
- ☐ D. 3/4

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Question 12 of 20

5.0 Points

Find the equation of the line with slope -6 and y-intercept 3. Write the equation in standard form $Ax + By = C$, $A \geq 0$.

- ☐ A. $6x - y = 3$
- ☐ B. $6x - y = -3$
- ☐ C. $6x + y = 3$
- ☐ D. $6x + y = -3$

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Question 13 of 20

5.0 Points

Write the equation of the line with slope 0 and y-intercept -7. Write the equation in standard form $Ax + By = C$, $A \geq 0$.

- ☐ A. $-7x - y = 0$
- ☐ B. $-7x + y = 0$
- ☐ C. $y = -7$
- ☐ D. $x = -7$

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Question 14 of 20

5.0 Points

Write the equation of the line passing through $(0, -5)$ and $(0, 1)$.

- ☐ A. $x = 0$
- ☐ B. $y = 0$
- ☐ C. $y = x + 0$
- ☐ D. $y = 6x$

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Question 15 of 20

5.0 Points

The Number Two Plumbing Co. charges \$45 per hour plus a fixed service call charge of \$65. Write an equation that will allow you to compute the total bill for any number of hours, x , that it takes to complete a job.

- ☐ A. $C = 45x + 65$
- ☐ B. $C = 65x + 45$
- ☐ C. $65x + 45C = 0$
- ☐ D. $45x + 65C = 0$

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5.0 Points

Question 16 of 20

A business purchases a copier for \$5,500 and anticipates it will be worth \$2,500 after 10 years. Use straight-line depreciation to find a linear model for the depreciated value V of the copy machine after t years of use.

- ☐ A. $V = -5,500 + 300t$
- ☐ B. $V = 300 - 5500t$
- ☐ C. $V = -300 + 5500t$
- ☐ D. $V = 5,500 - 300t$

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Question 17 of 20

5.0 Points

The regression model for the data shown in the table is $y = 2.3x + 3.9$

x	y
4	14
1	6
3	9
2	9
5	17
7	20
6	16

Use the model to estimate y when $x = 3.5$.

- ☐ A. 8.5
- ☐ B. 9
- ☐ C. -0.17
- ☐ D. 11.95

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Question 18 of 20

5.0 Points

The regression model for the data shown in the table is $y = -3.0x + 134.6$.

x	y
10	114
8	108
15	77
14	87
20	75
17	94

Use the model to estimate y when $x = 45$.

- ☐ A. -0.5
- ☐ B. -0.4
- ☐ C. -0.3
- ☐ D. -0.2

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Question 19 of 20

5.0 Points

Find a linear regression model for the data. Round regression coefficients to two significant digits.

x	y
2	15
5	12
6	16
11	14
12	20
15	35
20	38
21	42
24	47

- ☐ A. $y = 2.7x + 6.1$
- ☐ B. $y = 3x + 5$
- ☐ C. $y = 1.7x + 5.1$
- ☐ D. $y = 1.5 + 4.7$

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Question 20 of 20

5.0 Points

The data in the table shows the height x (in inches) compared to the shoe size y worn for a random sample of 12 males.

x	y
64	9
66	10
67	9.5
76	11.5
71.5	13
62	9

65.5	11
68	10.5
73	12
63	12
70	11
65	10

Find a linear regression model for the data.

- ☐ A. $y = 0.48x - 1.15$
- ☐ B. $y = 0.38x - 1.25$
- ☐ C. $y = 0.28x - 1.35$
- ☐ D. $y = 0.18x - 1.45$

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