Sample Documents

Algebra I

(ALG)

EducAide Software

Algebra 1A

Lesson #19

Name _____ Date _____

Solve.

1. $y = 4x + 1$
   $y = -5x - 8$

2. $y = -\frac{2}{3}x - 7$
   $y = \frac{1}{3}x - 1$

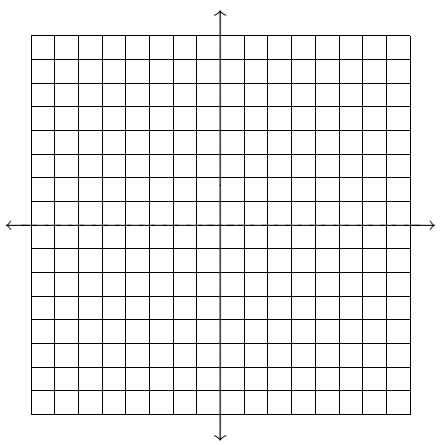
Solve using determinants.

3. $2x + y - 15 = 0$
   $5x - 6y + 22 = 0$

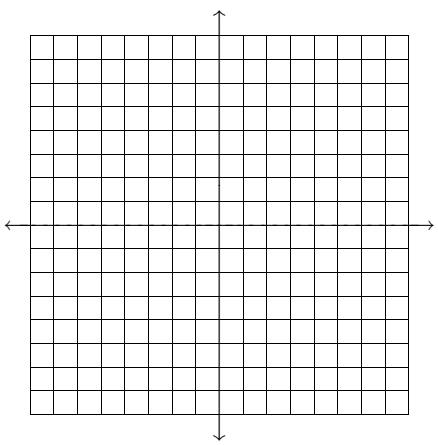
4. $-\frac{1}{7}x + \frac{4}{7}y = 1$
   $x + 2y = 1$

Solve by graphing.

5. $-5y - 6 = x$
   $4y + 3 = -x$



6. $y = x^2$
   $y = 2x - 3$



Solve by any method.

7. $y = -5x + 3$
   $y = x$

8. $y - 4 = \frac{3}{4}(x - 4)$
   $y + 5 = -(x + 1)$

9. One number is 8 more than 3 times another number. Their sum is 68. What are the numbers?

10. The sides of a square are half as long as the sides of an equilateral triangle. The sum of their perimeters is 45 ft. How long is each side of the triangle?

11. A motorboat can travel 48 mi down the river in 3 hours. It takes the boat 4 hours to travel the same distance up the river. Find the speed of the boat in stillwater.

12. The sum of two numbers is 20. Five more than twice the sum of the numbers is 45. What are the numbers?

Extra credit: Solve by synthetic division.

$-2x + z = -2$
$y + z = 1$
$4x + y - z = 5$

Algebra 1A Lesson #19 1/19/99

Answer List

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.
13.		

Catalog List

1. ALG QA 99	2. ALG QA 112	3. ALG QB 18
4. ALG QB 94	5. ALG QB 151	6. ALG QC 87
7. ALG QA 84	8. ALG QC 16	9. ALG QE 1
10. ALG QE 35	11. ALG QE 41	12. ALG QE 55
13. ALG QD 15		

Algebra 2A

Name _____

Per/Sec. _____ Date _____

Simplify.

1. $\left(4\frac{7}{8}\right)\left(-2\frac{2}{9}\right)$

2. $-0.3\overline{)-4.05}$

3. $\dfrac{r^9p^3}{(rp^6)(-r^3p^4)}$

4. $\left(\dfrac{9y^8}{-10y^3}\right)\left(\dfrac{-25y}{45y^6}\right)$

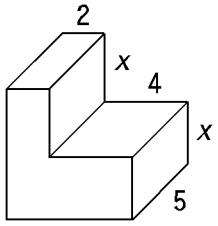
Write as a rational number, if possible.

5. $-0.090090009\ldots$

Solve.

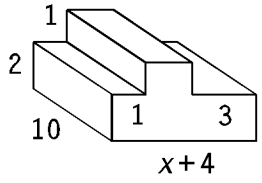
6. $\dfrac{|x|}{-x} = 1$

7. Find x if the surface area of the figure is 168.



8. Find x if the volume of the figure is 185. (Refer to the previous figure.)

Write a polynomial for the volume of the figure.

9. 

10. In an electrical circuit, the total resistance of two separate, parallel resistors can be calculated using the formula:

$$R_T = \frac{R_1 \cdot R_2}{R_1 + R_2}.$$

Find R_T, if $R_1 = 11$ ohms and $R_2 = 5.5$ ohms.

Algebra 2A Ms. Openshaw 3/16/93

Answer List

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.		

Catalog List

1. ALG AI 144	2. ALG AJ 140	3. ALG BE 34
4. ALG DM 82	5. ALG AL 43	6. ALG CG 26
7. ALG HI 64	8. ALG HI 63	9. ALG EM 16
10. ALG FG 46		

Algebra 2A

Name _____ Per/Sec. _____

Simplify.

1. $\dfrac{-4kn + 2kn^2 - kn^3}{-2kn}$

2. $\dfrac{\frac{1}{n+5} + \frac{1}{n-3}}{\frac{2n^2-3n-5}{n^2+2n-15}}$

3. $\sqrt{\dfrac{r+3}{r^2+6r+9}}$

Find the missing term that makes the trinomial a perfect square.

4. $(\,?\,) - 2k + 1$

Solve.

5. $3\,|5m + 1| - 6 \geq 12$

Tell whether the points listed in the table are collinear. If so, write the equation of the line that passes through them.

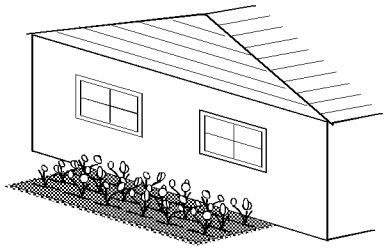
6.

x	-5	-3	2	4
y	6	4	-1	-3

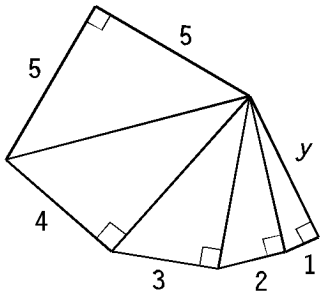
7. Given $M(3x, 8)$ and $N(-6, -x)$. Find the value of x, if the slope of $\overleftrightarrow{MN}$ is $\frac{2}{3}$.

8. Given $R(-3, -4)$ and $S(5, 4)$. Write the equation of the line which is perpendicular to $\overleftrightarrow{RS}$ and contains the midpoint of $\overline{RS}$.

9. A rectangular flower bed, whose dimensions are 4×11 m, has one of its longer sides against a house. The remaining three sides are to be increased by a strip of uniform width, so that the area of the garden is increased by 75%. How wide should that strip be?



10. Find y.



Algebra 2A Ms. Openshaw 3/16/93

Answer List

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.		

Catalog List

1. ALG LE 56	2. ALG LJ 129	3. ALG MD 196
4. ALG NA 35	5. ALG OE 116	6. ALG PL 14
7. ALG PG 57	8. ALG PH 54	9. ALG JF 103
10. ALG MK 20		