ALEKS® Practice for Departmental Exam 1 #1

Pre-Algebra and Introductory Algebra / MAT 96 Spring 1, 2015 – 6134 (Dr. Khoule)

Student Name/ID:

1. Evaluate the following.

$$|15|-|10-9|$$

2. Evaluate $-12-\left(-18\right)\div 6$

3. Multiply. Write your answer as a fraction in simplest form.

$$\frac{4}{5}\times\frac{10}{3}$$

4. Divide. Write your answer in simplest form.

$$\frac{9}{16}\div\frac{7}{10}$$

5. Find the least common denominator (LCD) of $\frac{1}{15}$ and $\frac{3}{10}$

6. Add.

$$\frac{9}{10}+\frac{3}{4}$$

Write your answer as a fraction in simplest form.

7. Solve the following proportion for v

$$\frac{v}{7}=\frac{8}{3}$$

Round your answer to the nearest tenth.

8. Martina runs 3 miles in 28 minutes. At the same rate, how many miles would she run in 42 minutes?

9.

(a) Write 6.27% as a decimal.

(b) Write 0.084 as a percentage.

10. What is 20% of 69?

11. An item is regularly priced at $\$40$ Lamar bought it at a discount of 30% off the regular price. How much did Lamar pay?

12. Solve for y

$$23+18y=-21+14y$$

Simplify your answer as much as possible.

13. Solve for u

$$-\frac{3}{2}=-\frac{2}{7}u-\frac{9}{5}$$

Simplify your answer as much as possible.

14. Solve for x

$$5x=y$$

15. Find the slope and the y-intercept of the line.

$$-3x-4y=-20$$

Write your answers in simplest form.

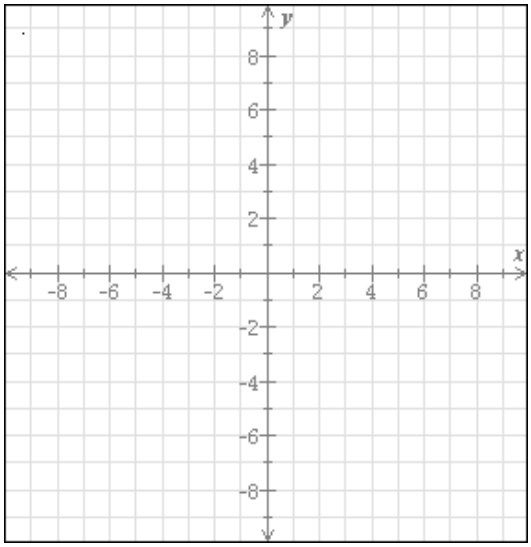
16. Translate this sentence into an equation.

60 *is the product of Rick's score and* 4

Use the variable r to represent Rick's score.

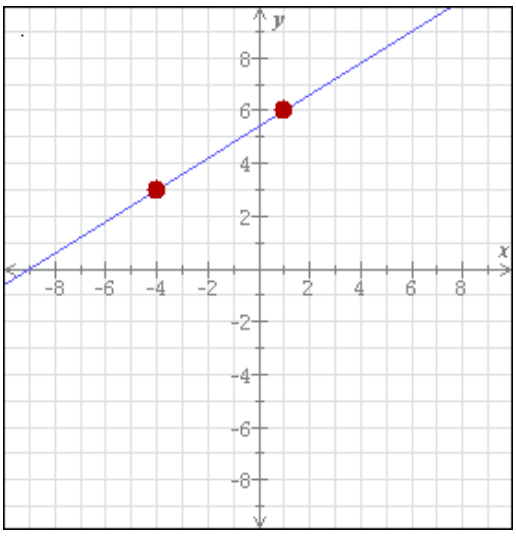
17. Graph the line.

$$-3x+y=-6$$



18. Write an equation in slope-intercept form for the line with slope 5 and y-intercept -6

19. Find an equation for the line below.



20. Solve the inequality for u

$$-4u + 37 \leq 13$$

Simplify your answer as much as possible.

Practice for Departmental Exam 1 #1 Answers for class Pre-Algebra and Introductory Algebra / MAT 96 Spring 1, 2015 – 6134

1. 14

2. -9

3. $\frac{8}{3}$

4. $\frac{45}{56}$

5. 30

6. $\frac{33}{20}$ or $1\frac{13}{20}$

7. $v = 18.7$

8. 4.5 miles

9. (a) 0.0627

(b) 8.4%

10. 13.8

11. $\$28$

12. $y = -11$

13. $u = -\frac{21}{20}$

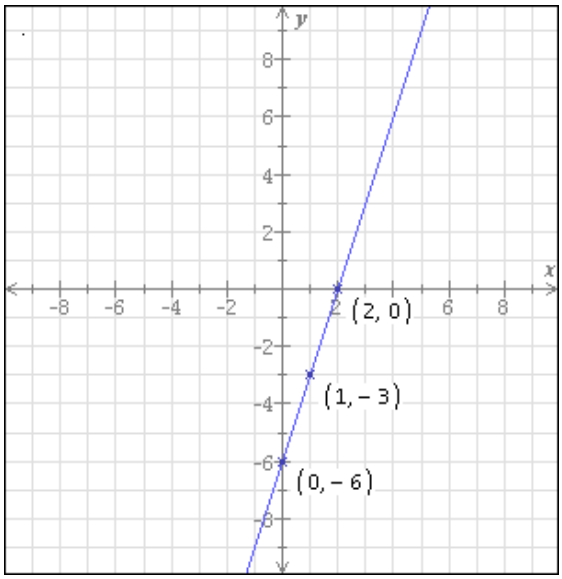
14. $x = \frac{y}{5}$

15. slope: $-\frac{3}{4}$

y-intercept: 5

16. $60 = 4r$

17.



18. $y = 5x - 6$

19. $y = \frac{3}{5}x + \frac{27}{5}$

20. $u \geq 6$