Math 32 Spring 2007
Assignment 2 Mr. McKeague

The problems below are covered in the first two chapters of your text.

1. Work each problem according to the instructions given.

a. Add: $-\frac{5}{8}+\left(-\frac{1}{2}\right)$ $-\frac{9}{8}$

b. Subtract: $-\frac{5}{8}-\left(-\frac{1}{2}\right)$ $-\frac{1}{8}$

c. Multiply: $-\frac{5}{8}\left(-\frac{1}{2}\right)$ $\frac{5}{16}$

d. Divide: $-\frac{5}{8}\div\left(-\frac{1}{2}\right)$ $\frac{5}{4}$

2. Work each problem according to the instructions given.

a. Solve: $8x - 5 = 0$ 5/8

b. Solve: $8x - 5 = -5$ 0

c. Add: $(8x - 5) + (2x - 5)$ $10x - 10$

d. Solve: $8x - 5 = 2x - 5$ 0

e. Multiply: $8(x - 5)$ $8x - 40$

f. Solve: $8(x - 5) = 2(x - 5)$ 5

3. Work each problem according to the instructions given.

a. Solve: $-4x + 5 = 20$ –15/4

b. Find the value of $-4x + 5$ when x is 3. –7

c. Solve for y: $-4x + 5y = 20$ $y = \frac{4}{5}x + 4$

d. Solve for x: $-4x + 5y = 20$ $x = \frac{5}{4}y - 5$

4. Work each problem according to the instructions given.

a. Solve: $-2x + 1 = 4$ $-\frac{3}{2} = -1.5$

b. Find the value of $-2x + 1$ when x is 8. –15

c. Solve for y: $-2x + y = 20$ $y = 2x + 20$

d. Solve for x: $-2x + y = 20$ $x = \frac{1}{2}y - 10$

5. Work each problem according to the instructions given.

a. Evaluate when $x = 0$: $-2x - 5$ -5

b. Solve: $-2x - 5 = 1$ -3

c. Is 0 a solution to $-2x - 5 > 1$? no

d. Solve: $-2x - 5 > 1$ $x < -3$

6. Solve each equation

a. $5x + 11 = 0$ $-\frac{11}{5}$

b. $5x + 11 = 9$ $-\frac{2}{5}$

c. $(5x + 11)^2 = 9$ $-\frac{14}{5}, -\frac{8}{5}$

d. $\sqrt{5x + 11} = 9$ 14

e. $\frac{5}{3} + \frac{11}{3x} = \frac{3}{x}$ $-\frac{2}{5}$

7. Here is what the United States Geological Survey has to say about the survival rates of the Apapane, one of the endemic birds of Hawaii.

Annual survival rates based on 1,584 recaptures of 429 banded individuals 0.72 ± 0.11 for adults and 0.13 ± 0.07 for juveniles.

Write the survival rates using inequalities. Then give the survival rates in terms of percent.

Answers:
Adults: $0.61 \le r \le 0.83$

The survival rate for adults is from 61% to 83%.

Juveniles: $0.06 \le r \le 0.20$

The survival rate for juveniles is from 6% to 20%.