

**Weekly Review #14**

Name: \_\_\_\_\_ Class: \_\_\_\_\_

Due Date #1: **Tues, 1/13** Due Date #2: **Fri, 1/16** (Regardless of whether you have class.)

1.) Factor completely:  $20x^4 + 55x^3 - 15x^2$



2.) If  $4(2x + 1) = 22 + 3(2x - 5)$ , then  $x =$

(A)  $\frac{2}{3}$

(C)  $-\frac{1}{2}$

(B)  $\frac{3}{2}$

(D) 8

3.) If  $a(x + b) = c$ , what is  $x$  in terms of  $a$ ,  $b$ , and  $c$ ?

(A)  $\frac{c-b}{a}$

(C)  $\frac{b+c}{a}$

(B)  $\frac{c-ab}{a}$

(D)  $\frac{ac-b}{a}$

4.) A postal clerk sold 50 postage stamps for \$16.05. Some were 39-cent stamps and the rest were 24-cent stamps. How many 39-cent stamps were sold?

(A) 19

(C) 27

(B) 23

(D) 31

5.) When  $x$  is an integer, what is the solution set of  $5 \leq x < 8$ ?

(A)  $\{5, 6, 7, 8\}$

(C)  $\{6, 7, 8\}$

(B)  $\{5, 6, 7\}$

(D)  $\{6, 7\}$

6.) What is the value of  $x$  in the inequality  $14 \geq 3x + 2$ ?

(A)  $-4 \geq x$

(C)  $4 \geq x$

(B)  $-4 \leq x$

(D)  $4 \leq x$

7.) Parking charges at Superior Parking Garage are \$5.00 for the first hour and \$1.50 for each additional 30 minutes. If Margo has \$12.50, what is the maximum number of hours she will be able to park her car at the garage?

(A)  $2\frac{1}{2}$

(C) 6

(B)  $3\frac{1}{2}$

(D)  $6\frac{1}{2}$

8.) When  $a^2 + a - 3$  is subtracted from  $3a^2 - 5$ , the difference is

(A)  $2a^2 - a - 2$

(C)  $2a^2 + a - 8$

(B)  $-2a^2 + a + 2$

(D)  $4a^2 + a - 8$



9.) If the length of the side of the square is represented by  $2x + 3$ , which expression represents the area of the square?

(A)  $4x^2 + 9$

(C)  $4x^2 + 6x + 9$

(B)  $8x + 12$

(D)  $4x^2 + 12x + 9$

10.) If the points  $(3, 2)$  and  $(c, -5)$  are on a line whose slope is  $-\frac{7}{2}$ , what is the value of  $c$ ?

(A) 5

(C)  $\frac{15}{7}$

(B) 6

(D) 4

