

**Fundamentals of College Algebra Summer Packet**

**ANSWER KEY**

1.

- a. 10
- b.  $-\frac{24}{3}, -42, -4.5, 10$
- c.  $\frac{1}{5}, -\frac{24}{3}, -42, -4.5, 10$
- d.  $\sqrt{5}, -\pi$

2.

- a.  $\frac{-3}{8} > \frac{-10}{8}, -0.375 > -1.25$
- b.  $\frac{9}{12} < \frac{10}{12}, 0.75 < 0.83$

3.

- a. 16.2
- b. -0.08

4.

- a. =
- b. <
- c. >

5.

- a. -27
- b. 18
- c. 14
- d. -8
- e. 4
- f. -36
- g. -36

6.

- a. -8
- b. -55
- c. 0
- d. -5
- e. -139
- f. -262
- g. -1900

7.

- a. 16
- b. -4

8.

- a. -48
- b. 30
- c. -80
- d. 72
- e. 120
- f. -336
- g. -62352
- h. 264
- i. 8190

9.

- a. 0
- b. 5
- c. -6
- d. 18
- e. -117
- f. -224

10.

- a.  $-1\frac{5}{23}$
- b.  $-2\frac{3}{8}$
- c.  $-28\frac{9}{10}$
- d. Undefined
- e.  $\frac{11}{24}$

11.

- a. 65
- b. 125
- c.  $\frac{256}{625}$
- d. 16
- e. 216

12.

- a. -4.05
- b. -91.29

13.

- a.  $y + 17$
- b.  $k - 7$
- c.  $x + 1$
- d.  $30c$
- e.  $\frac{d}{100}$
- f.  $\frac{1}{2}y$

14.

- a. The sum of a number and 9.
- b. Four decreased by the product of 7 and a number.
- c. Nine decreased by one-fourth of a number.
- d. Negative 10 times the difference of a number and 6.
- e. The difference of a number and 3, all divided by 4.
- f. One-fourth plus the quotient of a number and 8.
- g. The cube of a number, decreased by 1.

15.

- a.  $-35a$
- b.  $-5t$
- c.  $12y^2$
- d.  $-40t^3$
- e.  $2x$
- f.  $\frac{x^2}{4}$
- g.  $21r^3s^4$
- h.  $3x - 17$
- i.  $-12r + 19s$
- j. 15
- k.  $x^2$
- l.  $-y^2 + 19y$
- m.  $5x - 7$

16.

- a. 2
- b.  $-80$
- c.  $-8$
- d.  $-6$
- e. 10
- f.  $\frac{-1}{10}$
- g.  $-4$