

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

**College Algebra: Review (Prereq)**

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Show your work on a separate sheet of paper.

1. Simplify.

(a)  $7(15 + 2)$

(b)  $2(11 - 17)$

2. Add.

(a)  $\frac{5}{6} + \frac{1}{2}$

(b)  $\frac{9}{5} + \frac{1}{9}$

3. Solve the following equations.

(a)  $7x + 2 = 9$

(b)  $29x + 81 = 23$

(c)  $\frac{7}{4}x - 3 = 4$

(d)  $\frac{1}{5}x + \frac{3}{5} = 7$

(e)  $\frac{1}{9}x + \frac{8}{3} = -1$

(f)  $8x + 5 = 5x - 4$

(g)  $3(5x - 8) = -8$

4. Simplify.

(a)  $5^4$

(b)  $(-4)^2$

(c)  $-3^3$

(d)  $2^{-2}$

(e)  $(\frac{1}{3})^2$

5. Perform the indicated operations.

(a)  $(1 + 2i) + (3 - i)$

(b)  $(1 - i)(2 + 2i)$

(c)  $(2 + i)^2$