

Linear Equations Review

1. Write an equation from the following sentences:

- a) The sum of 9 and four times y equals 17
- b) One half of k plus 3 equals the difference of 19 and k

2. Solve each of the following equations:

a) $12x = 36$

b) $22 - k = 25$

c) $\frac{y}{4} = 3$

3. Solve each of the following multi-step equations:

a) $4a - 3 = 23$

b) $\frac{z}{9} + 4 = 6$

c) $\frac{40-x}{10} = 2$

4. Solve each of the following equations:

a) $2x + 10 = \frac{x}{5} + 28$

b) $12(w - 9) = w + 2$

5. Solve each of the following equations:

a) $|7x - 8| = 13$

b) $|k - 10| = 22$

6. Solve each of the following proportions:

a) $\frac{40}{5} = \frac{16}{k}$

b) $\frac{x-7}{12} = \frac{7}{21}$

7. Solve each of the following literal equations for x:

a) $rt + 6x = t - a$

b) $\frac{x}{kw} + 4y = 3w$