

## 28. Algebra: Equations, Variables, Sequences

A.1. Put the correct number in the space below to make each of these number sentences true.

(a)  $23 + \underline{\quad} = 32$

(b)  $25 - \underline{\quad} = 17$

(c)  $\underline{\quad} + 12 = 35$

(d)  $\underline{\quad} - 9 = 28$

(e)  $9 \times \underline{\quad} = 54$

(f)  $\underline{\quad} \times 6 = 72$

(g)  $63 \div \underline{\quad} = 9$

(h)  $\underline{\quad} \div 5 = 12$

(i)  $\underline{\quad} - 23 = 18$

2. Solve these equations.

(a)  $24 + a = 36$

$a = \underline{\quad}$

(b)  $y - 28 = 9$

$y = \underline{\quad}$

(c)  $x \div 6 = 7$

$x = \underline{\quad}$

(d)  $c + 14 = 41$

$c = \underline{\quad}$

(e)  $x - 17 = 19$

$x = \underline{\quad}$

(f)  $y \times 7 = 63$

$y = \underline{\quad}$

(g)  $x \div 9 = 8$

$x = \underline{\quad}$

(h)  $a \times 12 = 84$

$a = \underline{\quad}$

(i)  $27 - c = 11$

$c = \underline{\quad}$

3. Solve the following equations.

(a)  $3x = 27$

$x = \underline{\quad}$

(b)  $5a = 35$

$a = \underline{\quad}$

(c)  $9y = 54$

$y = \underline{\quad}$

(d)  $4c = 29 + 7$

$c = \underline{\quad}$

(e)  $5y = 31 + 9$

$y = \underline{\quad}$

(f)  $7x = 43 + 6$

$x = \underline{\quad}$

(g)  $3y + 8 = 23$

$y = \underline{\quad}$

(h)  $6x + 9 = 51$

$x = \underline{\quad}$

(i)  $8a - 5 = 67$

$a = \underline{\quad}$

4. Solve these equations.

(a)  $3x + 7 = 25 + 6$

$x = \underline{\quad}$

(b)  $4y + 9 = 32 + 5$

$y = \underline{\quad}$

(c)  $8a + 7 = 70 + 9$

$a = \underline{\quad}$

(d)  $9c - 4 = 56 + 3$

$c = \underline{\quad}$

(e)  $7x - 8 = 39 - 5$

$x = \underline{\quad}$

(f)  $6y - 9 = 52 + 5$

$y = \underline{\quad}$

(g)  $8a + 9 = 38 + 3$

$a = \underline{\quad}$

(h)  $6y - 7 = 26 + 3$

$y = \underline{\quad}$

(i)  $9x + 6 = 34 + 8$

$x = \underline{\quad}$

5. Now solve these equations.

(a)  $\frac{1}{3}y = 9$

$y = \underline{\quad}$

(b)  $\frac{3}{4}a = 12$

$a = \underline{\quad}$

(c)  $\frac{4}{5}x = 24$

$x = \underline{\quad}$

(d)  $\frac{5}{9}c = 35$

$c = \underline{\quad}$

(e)  $\frac{7}{8}x = 56$

$x = \underline{\quad}$

(f)  $\frac{5}{6}y = 35$

$y = \underline{\quad}$

(g)  $\frac{7}{12}a = 42$

$a = \underline{\quad}$

(h)  $\frac{8}{9}x = 72$

$x = \underline{\quad}$