

## Missing Numbers in Equations (A)

What value does each shape represent?

$8 - \diamond = 3$

$\times - 2 = 8$

$14 - \square = 9$

$\odot - 9 = 8$

$11 - \odot = 7$

$\blacklozenge - 4 = 8$

$\odot - 6 = 6$

$\nabla - 1 = 3$

$15 - \Delta = 9$

$12 - \blacksquare = 5$

$\times - 5 = 8$

$\blacksquare - 6 = 8$

$18 - * = 9$

$\square - 1 = 1$

$* - 6 = 2$

$18 - \blacksquare = 9$

$9 - * = 4$

$\square - 5 = 5$

$7 - \blacksquare = 6$

$8 - \Delta = 7$

$\Delta - 3 = 1$

$\times - 4 = 4$

$5 - \square = 4$

$10 - \spadesuit = 3$

$\odot - 6 = 4$

$\nabla - 1 = 8$

$10 - \square = 3$

$12 - \blacklozenge = 9$

$\diamond - 4 = 1$

$\Delta - 1 = 2$

$\blacksquare - 9 = 2$

$9 - \diamond = 7$

$\square - 7 = 2$

$6 - \Delta = 5$

$15 - \times = 8$

$\square - 6 = 7$

$\square - 5 = 8$

$9 - \square = 4$

$\blacklozenge - 8 = 4$

$\times - 1 = 1$

## Missing Numbers in Equations (A) Answers

What value does each shape represent?

$8 - \diamond = 3$

$\diamond = 5$

$\times - 2 = 8$

$\times = 10$

$14 - \square = 9$

$\square = 5$

$\odot - 9 = 8$

$\odot = 17$

$11 - \odot = 7$

$\odot = 4$

$\blacklozenge - 4 = 8$

$\blacklozenge = 12$

$\odot - 6 = 6$

$\odot = 12$

$\nabla - 1 = 3$

$\nabla = 4$

$15 - \Delta = 9$

$\Delta = 6$

$12 - \blacksquare = 5$

$\blacksquare = 7$

$\times - 5 = 8$

$\times = 13$

$\blacksquare - 6 = 8$

$\blacksquare = 14$

$18 - * = 9$

$* = 9$

$\square - 1 = 1$

$\square = 2$

$* - 6 = 2$

$* = 8$

$18 - \blacksquare = 9$

$\blacksquare = 9$

$9 - * = 4$

$* = 5$

$\square - 5 = 5$

$\square = 10$

$7 - \blacksquare = 6$

$\blacksquare = 1$

$8 - \Delta = 7$

$\Delta = 1$

$\Delta - 3 = 1$

$\Delta = 4$

$\times - 4 = 4$

$\times = 8$

$5 - \square = 4$

$\square = 1$

$10 - \spadesuit = 3$

$\spadesuit = 7$

$\odot - 6 = 4$

$\odot = 10$

$\nabla - 1 = 8$

$\nabla = 9$

$10 - \square = 3$

$\square = 7$

$12 - \blacklozenge = 9$

$\blacklozenge = 3$

$\diamond - 4 = 1$

$\diamond = 5$

$\Delta - 1 = 2$

$\Delta = 3$

$\blacksquare - 9 = 2$

$\blacksquare = 11$

$9 - \diamond = 7$

$\diamond = 2$

$\square - 7 = 2$

$\square = 9$

$6 - \Delta = 5$

$\Delta = 1$

$15 - \times = 8$

$\times = 7$

$\square - 6 = 7$

$\square = 13$

$\square - 5 = 8$

$\square = 13$

$9 - \square = 4$

$\square = 5$

$\blacklozenge - 8 = 4$

$\blacklozenge = 12$

$\times - 1 = 1$

$\times = 2$

## Missing Numbers in Equations (B)

What value does each shape represent?

$$\diamond - 2 = 5$$

$$\odot - 8 = 2$$

$$13 - \diamond = 8$$

$$\blacklozenge - 4 = 4$$

$$\frown - 3 = 1$$

$$4 - \odot = 3$$

$$13 - \spadesuit = 6$$

$$7 - \triangleup = 4$$

$$12 - \square = 8$$

$$\diamond - 9 = 3$$

$$14 - \boxplus = 8$$

$$16 - \diamond = 9$$

$$14 - \odot = 6$$

$$\star \odot - 3 = 8$$

$$12 - \boxplus = 7$$

$$\triangleup - 6 = 6$$

$$5 - \frown = 1$$

$$6 - \boxplus = 3$$

$$\heartsuit - 6 = 3$$

$$7 - \odot = 4$$

$$\blacklozenge - 2 = 6$$

$$\blacklozenge - 5 = 3$$

$$\triangleup - 3 = 8$$

$$\times - 3 = 7$$

$$11 - \heartsuit = 2$$

$$13 - \boxplus = 7$$

$$\Delta - 1 = 5$$

$$9 - \ast = 7$$

$$\spadesuit - 2 = 2$$

$$4 - \diamond = 1$$

$$10 - \heartsuit = 2$$

$$\times - 5 = 4$$

$$17 - \spadesuit = 8$$

$$\Delta - 2 = 3$$

$$\ast - 3 = 7$$

$$4 - \spadesuit = 3$$

$$8 - \odot = 2$$

$$13 - \times = 4$$

$$\star \odot - 5 = 6$$

$$\blacklozenge - 2 = 4$$

## Missing Numbers in Equations (B)

What value does each shape represent?

$$\diamond - 2 = 5$$

$$\diamond = 7$$

$$\odot - 8 = 2$$

$$\odot = 10$$

$$13 - \diamond = 8$$

$$\diamond = 5$$

$$\blacklozenge - 4 = 4$$

$$\blacklozenge = 8$$

$$\frown - 3 = 1$$

$$\frown = 4$$

$$4 - \odot = 3$$

$$\odot = 1$$

$$13 - \spadesuit = 6$$

$$\spadesuit = 7$$

$$7 - \square = 4$$

$$\square = 3$$

$$12 - \square = 8$$

$$\square = 4$$

$$\diamond - 9 = 3$$

$$\diamond = 12$$

$$14 - \boxplus = 8$$

$$\boxplus = 6$$

$$16 - \diamond = 9$$

$$\diamond = 7$$

$$14 - \odot = 6$$

$$\odot = 8$$

$$\star \odot - 3 = 8$$

$$\star \odot = 11$$

$$12 - \boxplus = 7$$

$$\boxplus = 5$$

$$\square - 6 = 6$$

$$\square = 12$$

$$5 - \frown = 1$$

$$\frown = 4$$

$$6 - \boxplus = 3$$

$$\boxplus = 3$$

$$\heartsuit - 6 = 3$$

$$\heartsuit = 9$$

$$7 - \odot = 4$$

$$\odot = 3$$

$$\blacklozenge - 2 = 6$$

$$\blacklozenge = 8$$

$$\blacklozenge - 5 = 3$$

$$\blacklozenge = 8$$

$$\square - 3 = 8$$

$$\square = 11$$

$$\boxtimes - 3 = 7$$

$$\boxtimes = 10$$

$$11 - \heartsuit = 2$$

$$\heartsuit = 9$$

$$13 - \boxplus = 7$$

$$\boxplus = 6$$

$$\Delta - 1 = 5$$

$$\Delta = 6$$

$$9 - \ast = 7$$

$$\ast = 2$$

$$\spadesuit - 2 = 2$$

$$\spadesuit = 4$$

$$4 - \diamond = 1$$

$$\diamond = 3$$

$$10 - \heartsuit = 2$$

$$\heartsuit = 8$$

$$\boxtimes - 5 = 4$$

$$\boxtimes = 9$$

$$17 - \spadesuit = 8$$

$$\spadesuit = 9$$

$$\Delta - 2 = 3$$

$$\Delta = 5$$

$$\ast - 3 = 7$$

$$\ast = 10$$

$$4 - \spadesuit = 3$$

$$\spadesuit = 1$$

$$8 - \odot = 2$$

$$\odot = 6$$

$$13 - \boxtimes = 4$$

$$\boxtimes = 9$$

$$\star \odot - 5 = 6$$

$$\star \odot = 11$$

$$\blacklozenge - 2 = 4$$

$$\blacklozenge = 6$$

## Missing Numbers in Equations (C)

What value does each shape represent?

$10 - \heartsuit = 4$

$\times - 8 = 6$

$\blacksquare - 5 = 5$

$6 - \square = 3$

$9 - \odot = 7$

$9 - \star = 6$

$\odot - 6 = 8$

$13 - \star = 7$

$11 - \odot = 7$

$\triangle - 8 = 4$

$\square - 2 = 1$

$\times - 6 = 6$

$\times - 4 = 2$

$16 - \odot = 7$

$8 - \triangle = 1$

$\square - 4 = 3$

$8 - \square = 6$

$\blacksquare - 9 = 6$

$\square - 7 = 9$

$\Delta - 7 = 6$

$3 - \triangle = 1$

$\ast - 3 = 1$

$12 - \triangle = 4$

$12 - \ast = 8$

$\spadesuit - 9 = 3$

$\times - 3 = 8$

$\blacksquare - 1 = 2$

$\boxplus - 6 = 3$

$\heartsuit - 7 = 8$

$8 - \spadesuit = 3$

$14 - \blacklozenge = 5$

$\heartsuit - 7 = 2$

$\Delta - 1 = 6$

$\blacksquare - 1 = 9$

$14 - \blacklozenge = 8$

$\ast - 3 = 7$

$\Delta - 6 = 5$

$\star - 6 = 4$

$\odot - 2 = 1$

$\odot - 9 = 9$

## Missing Numbers in Equations (C)

What value does each shape represent?

$10 - \heartsuit = 4$

$\heartsuit = 6$

$\times - 8 = 6$

$\times = 14$

$\blacksquare - 5 = 5$

$\blacksquare = 10$

$6 - \square = 3$

$\square = 3$

$9 - \odot = 7$

$\odot = 2$

$9 - \star \odot = 6$

$\star \odot = 3$

$\odot - 6 = 8$

$\odot = 14$

$13 - \star \odot = 7$

$\star \odot = 6$

$11 - \odot = 7$

$\odot = 4$

$\triangle - 8 = 4$

$\triangle = 12$

$\square - 2 = 1$

$\square = 3$

$\times - 6 = 6$

$\times = 12$

$\times - 4 = 2$

$\times = 6$

$16 - \odot = 7$

$\odot = 9$

$8 - \triangle = 1$

$\triangle = 7$

$\square - 4 = 3$

$\square = 7$

$8 - \square = 6$

$\square = 2$

$\blacksquare - 9 = 6$

$\blacksquare = 15$

$\square - 7 = 9$

$\square = 16$

$\triangle - 7 = 6$

$\triangle = 13$

$3 - \triangle = 1$

$\triangle = 2$

$\ast - 3 = 1$

$\ast = 4$

$12 - \triangle = 4$

$\triangle = 8$

$12 - \ast = 8$

$\ast = 4$

$\spadesuit - 9 = 3$

$\spadesuit = 12$

$\times - 3 = 8$

$\times = 11$

$\blacksquare - 1 = 2$

$\blacksquare = 3$

$\boxplus - 6 = 3$

$\boxplus = 9$

$\heartsuit - 7 = 8$

$\heartsuit = 15$

$8 - \spadesuit = 3$

$\spadesuit = 5$

$14 - \blacklozenge = 5$

$\blacklozenge = 9$

$\heartsuit - 7 = 2$

$\heartsuit = 9$

$\triangle - 1 = 6$

$\triangle = 7$

$\blacksquare - 1 = 9$

$\blacksquare = 10$

$14 - \blacklozenge = 8$

$\blacklozenge = 6$

$\ast - 3 = 7$

$\ast = 10$

$\triangle - 6 = 5$

$\triangle = 11$

$\star \odot - 6 = 4$

$\star \odot = 10$

$\odot - 2 = 1$

$\odot = 3$

$\odot - 9 = 9$

$\odot = 18$

## Missing Numbers in Equations (D)

What value does each shape represent?

$$\blacksquare - 3 = 3$$

$$16 - \square = 7$$

$$\triangle - 1 = 3$$

$$\diamond - 1 = 7$$

$$\blacklozenge - 5 = 7$$

$$9 - \square = 7$$

$$\star \ominus - 5 = 2$$

$$\odot - 4 = 2$$

$$9 - \heartsuit = 6$$

$$\star \oplus - 8 = 7$$

$$7 - \ast = 1$$

$$11 - \square = 9$$

$$\square \square - 5 = 7$$

$$10 - \odot = 8$$

$$\spadesuit - 9 = 7$$

$$\square - 5 = 7$$

$$9 - \times = 4$$

$$\boxplus - 2 = 9$$

$$\triangle - 2 = 9$$

$$13 - \frown = 9$$

$$\odot - 9 = 8$$

$$\diamond - 7 = 3$$

$$\blacksquare - 7 = 5$$

$$6 - \spadesuit = 3$$

$$\spadesuit - 3 = 3$$

$$13 - \spadesuit = 4$$

$$9 - \ast = 7$$

$$3 - \odot = 2$$

$$7 - \square \square = 3$$

$$12 - \boxplus = 8$$

$$8 - \frown = 4$$

$$\star \oplus - 5 = 1$$

$$\odot - 4 = 4$$

$$\odot - 8 = 1$$

$$\square = 4$$

$$\star \oplus - 9 = 1$$

$$15 - \frown = 7$$

$$5 - \heartsuit = 3$$

$$\star \oplus - 8 = 1$$

$$\triangle - 6 = 9$$

## Missing Numbers in Equations (D)

What value does each shape represent?

$$\blacksquare - 3 = 3$$

$$\blacksquare = 6$$

$$16 - \square = 7$$

$$\square = 9$$

$$\triangle - 1 = 3$$

$$\triangle = 4$$

$$\diamond - 1 = 7$$

$$\diamond = 8$$

$$\blacklozenge - 5 = 7$$

$$\blacklozenge = 12$$

$$9 - \square = 7$$

$$\square = 2$$

$$\star \ominus - 5 = 2$$

$$\star \ominus = 7$$

$$\odot - 4 = 2$$

$$\odot = 6$$

$$9 - \heartsuit = 6$$

$$\heartsuit = 3$$

$$\star \ominus - 8 = 7$$

$$\star \ominus = 15$$

$$7 - \ast = 1$$

$$\ast = 6$$

$$11 - \square = 9$$

$$\square = 2$$

$$\square \square - 5 = 7$$

$$\square \square = 12$$

$$10 - \odot = 8$$

$$\odot = 2$$

$$\spadesuit - 9 = 7$$

$$\spadesuit = 16$$

$$\square - 5 = 7$$

$$\square = 12$$

$$9 - \times = 4$$

$$\times = 5$$

$$\boxplus - 2 = 9$$

$$\boxplus = 11$$

$$\triangle - 2 = 9$$

$$\triangle = 11$$

$$13 - \frown = 9$$

$$\frown = 4$$

$$\odot - 9 = 8$$

$$\odot = 17$$

$$\diamond - 7 = 3$$

$$\diamond = 10$$

$$\blacksquare - 7 = 5$$

$$\blacksquare = 12$$

$$6 - \spadesuit = 3$$

$$\spadesuit = 3$$

$$\spadesuit - 3 = 3$$

$$\spadesuit = 6$$

$$13 - \spadesuit = 4$$

$$\spadesuit = 9$$

$$9 - \ast = 7$$

$$\ast = 2$$

$$3 - \odot = 2$$

$$\odot = 1$$

$$7 - \square \square = 3$$

$$\square \square = 4$$

$$12 - \boxplus = 8$$

$$\boxplus = 4$$

$$8 - \frown = 4$$

$$\frown = 4$$

$$\star \ominus - 5 = 1$$

$$\star \ominus = 6$$

$$\odot - 4 = 4$$

$$\odot = 8$$

$$\odot - 8 = 1$$

$$\odot = 9$$

$$\square - 4 = 4$$

$$\square = 8$$

$$\star \ominus - 9 = 1$$

$$\star \ominus = 10$$

$$15 - \frown = 7$$

$$\frown = 8$$

$$5 - \heartsuit = 3$$

$$\heartsuit = 2$$

$$\star \ominus - 8 = 1$$

$$\star \ominus = 9$$

$$\triangle - 6 = 9$$

$$\triangle = 15$$



## Missing Numbers in Equations (E)

What value does each shape represent?

$17 - \triangle = 8$

$6 - \diamond = 4$

$\diamond - 2 = 2$

$\heartsuit - 9 = 8$

$\odot - 4 = 9$

$14 - \heartsuit = 8$

$\odot - 7 = 5$

$\odot - 7 = 4$

$\square - 2 = 9$

$\heartsuit - 6 = 3$

$13 - \square = 8$

$12 - \odot = 4$

$\diamond - 6 = 6$

$\square - 8 = 2$

$\nabla - 3 = 6$

$10 - \square = 3$

$\diamond - 6 = 9$

$9 - \odot = 8$

$10 - \triangle = 5$

$\heartsuit - 5 = 8$

$\spadesuit - 2 = 9$

$\times - 4 = 1$

$15 - \boxplus = 6$

$12 - \square = 9$

$\triangle - 4 = 7$

$\square - 9 = 4$

$5 - \odot = 4$

$14 - \odot = 8$

$2 - \spadesuit = 1$

$10 - \diamond = 3$

$7 - \square = 1$

$10 - \diamond = 6$

$\square - 4 = 9$

$\blacksquare - 5 = 2$

$\odot - 2 = 9$

$\times - 8 = 2$

$\triangle - 5 = 2$

$18 - \blacklozenge = 9$

$\triangle - 1 = 2$

$18 - \odot = 9$

## Missing Numbers in Equations (E)

What value does each shape represent?

$17 - \triangle = 8$

$\triangle = 9$

$6 - \diamond = 4$

$\diamond = 2$

$\diamond - 2 = 2$

$\diamond = 4$

$\heartsuit - 9 = 8$

$\heartsuit = 17$

$\odot - 4 = 9$

$\odot = 13$

$14 - \heartsuit = 8$

$\heartsuit = 6$

$\odot - 7 = 5$

$\odot = 12$

$\odot - 7 = 4$

$\odot = 11$

$\square - 2 = 9$

$\square = 11$

$\heartsuit - 6 = 3$

$\heartsuit = 9$

$13 - \diamond = 8$

$\diamond = 5$

$12 - \odot = 4$

$\odot = 8$

$\diamond - 6 = 6$

$\diamond = 12$

$\square - 8 = 2$

$\square = 10$

$\nabla - 3 = 6$

$\nabla = 9$

$10 - \square = 3$

$\square = 7$

$\diamond - 6 = 9$

$\diamond = 15$

$9 - \odot = 8$

$\odot = 1$

$10 - \triangle = 5$

$\triangle = 5$

$\heartsuit - 5 = 8$

$\heartsuit = 13$

$\spadesuit - 2 = 9$

$\spadesuit = 11$

$\times - 4 = 1$

$\times = 5$

$15 - \boxplus = 6$

$\boxplus = 9$

$12 - \square = 9$

$\square = 3$

$\triangle - 4 = 7$

$\triangle = 11$

$\square - 9 = 4$

$\square = 13$

$5 - \odot = 4$

$\odot = 1$

$14 - \odot = 8$

$\odot = 6$

$2 - \spadesuit = 1$

$\spadesuit = 1$

$10 - \diamond = 3$

$\diamond = 7$

$7 - \square = 1$

$\square = 6$

$10 - \diamond = 6$

$\diamond = 4$

$\square - 4 = 9$

$\square = 13$

$\blacksquare - 5 = 2$

$\blacksquare = 7$

$\odot - 2 = 9$

$\odot = 11$

$\times - 8 = 2$

$\times = 10$

$\triangle - 5 = 2$

$\triangle = 7$

$18 - \blacklozenge = 9$

$\blacklozenge = 9$

$\triangle - 1 = 2$

$\triangle = 3$

$18 - \odot = 9$

$\odot = 9$

## Missing Numbers in Equations (F)

What value does each shape represent?

$$\diamond - 3 = 4$$

$$15 - \square = 6$$

$$9 - \triangle = 2$$

$$13 - \square = 5$$

$$\diamond - 3 = 9$$

$$\times - 3 = 6$$

$$\blacklozenge - 4 = 6$$

$$\boxplus - 3 = 7$$

$$9 - \times = 3$$

$$7 - \blacksquare = 4$$

$$\diamond - 2 = 2$$

$$6 - \square = 5$$

$$\diamond - 3 = 1$$

$$\diamond - 2 = 4$$

$$\square - 8 = 4$$

$$14 - \square = 6$$

$$\odot - 6 = 8$$

$$\odot - 1 = 6$$

$$7 - \Delta = 2$$

$$\triangle - 2 = 7$$

$$5 - \odot = 1$$

$$\square - 7 = 3$$

$$13 - \blacksquare = 4$$

$$9 - \times = 6$$

$$7 - \triangle = 4$$

$$10 - \nabla = 1$$

$$\diamond - 2 = 2$$

$$\Delta - 3 = 2$$

$$\square - 3 = 2$$

$$11 - \odot = 2$$

$$\odot - 1 = 5$$

$$15 - \Delta = 6$$

$$\odot - 4 = 6$$

$$\square - 1 = 2$$

$$\odot - 3 = 1$$

$$11 - \odot = 7$$

$$10 - \triangle = 5$$

$$8 - \nabla = 2$$

$$\ast - 2 = 9$$

$$14 - \times = 5$$

## Missing Numbers in Equations (F)

What value does each shape represent?

$$\diamond - 3 = 4$$

$$\diamond = 7$$

$$15 - \square = 6$$

$$\square = 9$$

$$9 - \triangle = 2$$

$$\triangle = 7$$

$$13 - \square = 5$$

$$\square = 8$$

$$\diamond - 3 = 9$$

$$\diamond = 12$$

$$\times - 3 = 6$$

$$\times = 9$$

$$\blacklozenge - 4 = 6$$

$$\blacklozenge = 10$$

$$\boxplus - 3 = 7$$

$$\boxplus = 10$$

$$9 - \times = 3$$

$$\times = 6$$

$$7 - \blacksquare = 4$$

$$\blacksquare = 3$$

$$\diamond - 2 = 2$$

$$\diamond = 4$$

$$6 - \square = 5$$

$$\square = 1$$

$$\diamond - 3 = 1$$

$$\diamond = 4$$

$$\diamond - 2 = 4$$

$$\diamond = 6$$

$$\square - 8 = 4$$

$$\square = 12$$

$$14 - \square = 6$$

$$\square = 8$$

$$\odot - 6 = 8$$

$$\odot = 14$$

$$\star - 1 = 6$$

$$\star = 7$$

$$7 - \Delta = 2$$

$$\Delta = 5$$

$$\triangle - 2 = 7$$

$$\triangle = 9$$

$$5 - \odot = 1$$

$$\odot = 4$$

$$\square - 7 = 3$$

$$\square = 10$$

$$13 - \blacksquare = 4$$

$$\blacksquare = 9$$

$$9 - \times = 6$$

$$\times = 3$$

$$7 - \triangle = 4$$

$$\triangle = 3$$

$$10 - \nabla = 1$$

$$\nabla = 9$$

$$\diamond - 2 = 2$$

$$\diamond = 4$$

$$\Delta - 3 = 2$$

$$\Delta = 5$$

$$\square - 3 = 2$$

$$\square = 5$$

$$11 - \star = 2$$

$$\star = 9$$

$$\odot - 1 = 5$$

$$\odot = 6$$

$$15 - \Delta = 6$$

$$\Delta = 9$$

$$\odot - 4 = 6$$

$$\odot = 10$$

$$\square - 1 = 2$$

$$\square = 3$$

$$\star - 3 = 1$$

$$\star = 4$$

$$11 - \star = 7$$

$$\star = 4$$

$$10 - \triangle = 5$$

$$\triangle = 5$$

$$8 - \nabla = 2$$

$$\nabla = 6$$

$$\ast - 2 = 9$$

$$\ast = 11$$

$$14 - \times = 5$$

$$\times = 9$$

## Missing Numbers in Equations (G)

What value does each shape represent?

$16 - \diamond = 9$

$\nabla - 7 = 6$

$\square - 1 = 1$

$\odot - 7 = 7$

$4 - \blacklozenge = 2$

$15 - \square = 9$

$\square - 3 = 5$

$11 - \Delta = 9$

$9 - \heartsuit = 5$

$\odot - 1 = 3$

$13 - \diamond = 8$

$9 - \spadesuit = 1$

$\nabla - 5 = 7$

$\square - 5 = 1$

$\smile - 8 = 4$

$4 - \diamond = 2$

$\diamond - 9 = 1$

$12 - \times = 9$

$\diamond - 3 = 2$

$\boxplus - 5 = 5$

$15 - \square = 6$

$\square - 5 = 9$

$13 - \odot = 7$

$6 - \spadesuit = 2$

$\odot - 9 = 1$

$\times - 7 = 5$

$\heartsuit - 4 = 4$

$12 - \odot = 4$

$\ast - 6 = 8$

$7 - \blacklozenge = 2$

$15 - \square = 7$

$\odot - 4 = 1$

$8 - \boxplus = 5$

$\square - 8 = 7$

$7 - \square = 1$

$\times - 4 = 3$

$5 - \blacksquare = 1$

$8 - \spadesuit = 6$

$2 - \odot = 1$

$\diamond - 3 = 6$

## Missing Numbers in Equations (G)

What value does each shape represent?

$16 - \diamond = 9$

$\diamond = 7$

$\nabla - 7 = 6$

$\nabla = 13$

$\square - 1 = 1$

$\square = 2$

$\odot - 7 = 7$

$\odot = 14$

$4 - \blacklozenge = 2$

$\blacklozenge = 2$

$15 - \square = 9$

$\square = 6$

$\square - 3 = 5$

$\square = 8$

$11 - \Delta = 9$

$\Delta = 2$

$9 - \heartsuit = 5$

$\heartsuit = 4$

$\odot - 1 = 3$

$\odot = 4$

$13 - \diamond = 8$

$\diamond = 5$

$9 - \spadesuit = 1$

$\spadesuit = 8$

$\nabla - 5 = 7$

$\nabla = 12$

$\square - 5 = 1$

$\square = 6$

$\cup - 8 = 4$

$\cup = 12$

$4 - \diamond = 2$

$\diamond = 2$

$\diamond - 9 = 1$

$\diamond = 10$

$12 - \times = 9$

$\times = 3$

$\diamond - 3 = 2$

$\diamond = 5$

$\boxplus - 5 = 5$

$\boxplus = 10$

$15 - \square = 6$

$\square = 9$

$\square - 5 = 9$

$\square = 14$

$13 - \odot = 7$

$\odot = 6$

$6 - \spadesuit = 2$

$\spadesuit = 4$

$\odot - 9 = 1$

$\odot = 10$

$\times - 7 = 5$

$\times = 12$

$\heartsuit - 4 = 4$

$\heartsuit = 8$

$12 - \odot = 4$

$\odot = 8$

$\ast - 6 = 8$

$\ast = 14$

$7 - \blacklozenge = 2$

$\blacklozenge = 5$

$15 - \square = 7$

$\square = 8$

$\odot - 4 = 1$

$\odot = 5$

$8 - \boxplus = 5$

$\boxplus = 3$

$\square - 8 = 7$

$\square = 15$

$7 - \square = 1$

$\square = 6$

$\times - 4 = 3$

$\times = 7$

$5 - \blacksquare = 1$

$\blacksquare = 4$

$8 - \spadesuit = 6$

$\spadesuit = 2$

$2 - \odot = 1$

$\odot = 1$

$\diamond - 3 = 6$

$\diamond = 9$

## Missing Numbers in Equations (H)

What value does each shape represent?

$$\diamond - 5 = 2$$

$$\square - 7 = 6$$

$$6 - \square = 5$$

$$5 - \odot = 2$$

$$11 - \smile = 4$$

$$9 - \odot = 3$$

$$\diamond - 7 = 1$$

$$\Delta - 5 = 9$$

$$13 - \star = 5$$

$$18 - \nabla = 9$$

$$16 - \diamond = 8$$

$$\spadesuit - 1 = 2$$

$$4 - \blacksquare = 1$$

$$\blacklozenge - 6 = 8$$

$$9 - \Delta = 4$$

$$12 - \square = 8$$

$$7 - \square = 4$$

$$\boxtimes - 6 = 2$$

$$\star - 7 = 7$$

$$\star - 7 = 8$$

$$6 - \blacklozenge = 5$$

$$\star - 4 = 9$$

$$\odot - 3 = 4$$

$$5 - * = 4$$

$$16 - \square = 7$$

$$13 - \blacklozenge = 5$$

$$8 - \smile = 6$$

$$\square - 9 = 9$$

$$\square - 3 = 3$$

$$4 - \boxplus = 2$$

$$12 - \smile = 3$$

$$18 - * = 9$$

$$\spadesuit - 1 = 6$$

$$\star - 1 = 9$$

$$12 - \square = 3$$

$$17 - \Delta = 8$$

$$\spadesuit - 5 = 8$$

$$\square - 3 = 1$$

$$5 - \diamond = 2$$

$$\odot - 2 = 3$$

## Missing Numbers in Equations (H)

What value does each shape represent?

$$\diamond - 5 = 2$$

$$\diamond = 7$$

$$\square - 7 = 6$$

$$\square = 13$$

$$6 - \square = 5$$

$$\square = 1$$

$$5 - \odot = 2$$

$$\odot = 3$$

$$11 - \triangle = 4$$

$$\triangle = 7$$

$$9 - \odot = 3$$

$$\odot = 6$$

$$\diamond - 7 = 1$$

$$\diamond = 8$$

$$\Delta - 5 = 9$$

$$\Delta = 14$$

$$13 - \star = 5$$

$$\star = 8$$

$$18 - \nabla = 9$$

$$\nabla = 9$$

$$16 - \diamond = 8$$

$$\diamond = 8$$

$$\spadesuit - 1 = 2$$

$$\spadesuit = 3$$

$$4 - \blacksquare = 1$$

$$\blacksquare = 3$$

$$\blacklozenge - 6 = 8$$

$$\blacklozenge = 14$$

$$9 - \Delta = 4$$

$$\Delta = 5$$

$$12 - \square = 8$$

$$\square = 4$$

$$7 - \square = 4$$

$$\square = 3$$

$$\boxtimes - 6 = 2$$

$$\boxtimes = 8$$

$$\star - 7 = 7$$

$$\star = 14$$

$$\star - 7 = 8$$

$$\star = 15$$

$$6 - \blacklozenge = 5$$

$$\blacklozenge = 1$$

$$\star - 4 = 9$$

$$\star = 13$$

$$\odot - 3 = 4$$

$$\odot = 7$$

$$5 - \ast = 4$$

$$\ast = 1$$

$$16 - \square = 7$$

$$\square = 9$$

$$13 - \blacklozenge = 5$$

$$\blacklozenge = 8$$

$$8 - \triangle = 6$$

$$\triangle = 2$$

$$\square = \square - 9 = 9$$

$$\square = 18$$

$$\square = \square - 3 = 3$$

$$\square = 6$$

$$4 - \boxplus = 2$$

$$\boxplus = 2$$

$$12 - \triangle = 3$$

$$\triangle = 9$$

$$18 - \ast = 9$$

$$\ast = 9$$

$$\spadesuit - 1 = 6$$

$$\spadesuit = 7$$

$$\star - 1 = 9$$

$$\star = 10$$

$$12 - \square = 3$$

$$\square = 9$$

$$17 - \Delta = 8$$

$$\Delta = 9$$

$$\spadesuit - 5 = 8$$

$$\spadesuit = 13$$

$$\square = \square - 3 = 1$$

$$\square = 4$$

$$5 - \diamond = 2$$

$$\diamond = 3$$

$$\odot - 2 = 3$$

$$\odot = 5$$



## Missing Numbers in Equations (I)

What value does each shape represent?

$$\odot - 5 = 4$$

$$\square - 2 = 8$$

$$17 - \nabla = 8$$

$$6 - \boxplus = 1$$

$$\boxplus - 5 = 3$$

$$14 - \odot = 5$$

$$\ast - 9 = 4$$

$$5 - \diamond = 2$$

$$12 - \diamondsuit = 3$$

$$12 - \square = 6$$

$$7 - \blacklozenge = 2$$

$$6 - \nabla = 4$$

$$\heartsuit - 3 = 4$$

$$\ast - 5 = 2$$

$$9 - \square = 8$$

$$14 - \odot\star = 7$$

$$11 - \Delta = 2$$

$$\Delta - 8 = 1$$

$$\square - 6 = 8$$

$$11 - \diamond = 8$$

$$\Delta - 4 = 4$$

$$6 - \square = 4$$

$$9 - \frown = 2$$

$$\odot - 5 = 8$$

$$12 - \ast = 5$$

$$16 - \spadesuit = 8$$

$$\frown - 5 = 5$$

$$12 - \nabla = 3$$

$$\odot - 3 = 7$$

$$10 - \nabla = 1$$

$$\blacklozenge - 3 = 5$$

$$\blacklozenge - 4 = 5$$

$$\boxplus - 3 = 3$$

$$\diamondsuit - 3 = 5$$

$$\blacklozenge - 4 = 2$$

$$\blacksquare - 2 = 4$$

$$8 - \ast = 7$$

$$\square - 1 = 5$$

$$\odot - 8 = 6$$

$$5 - \odot\star = 4$$

## Missing Numbers in Equations (I)

What value does each shape represent?

$$\ominus - 5 = 4$$

$$\ominus = 9$$

$$\square - 2 = 8$$

$$\square = 10$$

$$17 - \nabla = 8$$

$$\nabla = 9$$

$$6 - \boxplus = 1$$

$$\boxplus = 5$$

$$\boxplus - 5 = 3$$

$$\boxplus = 8$$

$$14 - \ominus = 5$$

$$\ominus = 9$$

$$\ast - 9 = 4$$

$$\ast = 13$$

$$5 - \diamond = 2$$

$$\diamond = 3$$

$$12 - \diamondsuit = 3$$

$$\diamondsuit = 9$$

$$12 - \square = 6$$

$$\square = 6$$

$$7 - \blacklozenge = 2$$

$$\blacklozenge = 5$$

$$6 - \nabla = 4$$

$$\nabla = 2$$

$$\heartsuit - 3 = 4$$

$$\heartsuit = 7$$

$$\ast - 5 = 2$$

$$\ast = 7$$

$$9 - \square = 8$$

$$\square = 1$$

$$14 - \odot = 7$$

$$\odot = 7$$

$$11 - \Delta = 2$$

$$\Delta = 9$$

$$\Delta - 8 = 1$$

$$\Delta = 9$$

$$\square - 6 = 8$$

$$\square = 14$$

$$11 - \diamond = 8$$

$$\diamond = 3$$

$$\Delta - 4 = 4$$

$$\Delta = 8$$

$$6 - \square = 4$$

$$\square = 2$$

$$9 - \frown = 2$$

$$\frown = 7$$

$$\odot - 5 = 8$$

$$\odot = 13$$

$$12 - \ast = 5$$

$$\ast = 7$$

$$16 - \spadesuit = 8$$

$$\spadesuit = 8$$

$$\frown - 5 = 5$$

$$\frown = 10$$

$$12 - \nabla = 3$$

$$\nabla = 9$$

$$\ominus - 3 = 7$$

$$\ominus = 10$$

$$10 - \nabla = 1$$

$$\nabla = 9$$

$$\blacklozenge - 3 = 5$$

$$\blacklozenge = 8$$

$$\blacklozenge - 4 = 5$$

$$\blacklozenge = 9$$

$$\boxplus - 3 = 3$$

$$\boxplus = 6$$

$$\diamondsuit - 3 = 5$$

$$\diamondsuit = 8$$

$$\blacklozenge - 4 = 2$$

$$\blacklozenge = 6$$

$$\blacksquare - 2 = 4$$

$$\blacksquare = 6$$

$$8 - \ast = 7$$

$$\ast = 1$$

$$\square - 1 = 5$$

$$\square = 6$$

$$\odot - 8 = 6$$

$$\odot = 14$$

$$5 - \odot = 4$$

$$\odot = 1$$

## Missing Numbers in Equations (J)

What value does each shape represent?

$10 - \odot = 5$

$\spadesuit - 6 = 8$

$\nabla - 1 = 1$

$\square - 6 = 4$

$\square - 8 = 9$

$\times - 5 = 5$

$\smile - 6 = 5$

$14 - \triangle = 9$

$12 - \spadesuit = 4$

$\diamond - 6 = 9$

$\blacksquare - 3 = 8$

$\square - 5 = 1$

$\heartsuit - 1 = 3$

$\triangle - 3 = 9$

$\diamond - 7 = 4$

$7 - \triangle = 2$

$\spadesuit - 9 = 4$

$\odot - 1 = 1$

$3 - \heartsuit = 2$

$7 - \odot = 2$

$\times - 6 = 6$

$12 - \diamond = 8$

$2 - \square = 1$

$8 - \spadesuit = 7$

$\diamond - 6 = 8$

$9 - \diamond = 4$

$\nabla - 7 = 4$

$12 - \blacklozenge = 6$

$6 - \spadesuit = 1$

$\smile - 3 = 1$

$11 - \smile = 9$

$4 - \nabla = 2$

$7 - \square = 5$

$\diamond - 4 = 6$

$14 - \blacksquare = 5$

$\diamond - 8 = 7$

$9 - \smile = 8$

$\ast - 4 = 5$

$\ast - 8 = 7$

$10 - \square = 4$

## Missing Numbers in Equations (J)

What value does each shape represent?

$10 - \odot = 5$

$\odot = 5$

$\spadesuit - 6 = 8$

$\spadesuit = 14$

$\nabla - 1 = 1$

$\nabla = 2$

$\square - 6 = 4$

$\square = 10$

$\square - 8 = 9$

$\square = 17$

$\times - 5 = 5$

$\times = 10$

$\cup - 6 = 5$

$\cup = 11$

$14 - \square = 9$

$\square = 5$

$12 - \spadesuit = 4$

$\spadesuit = 8$

$\diamond - 6 = 9$

$\diamond = 15$

$\blacksquare - 3 = 8$

$\blacksquare = 11$

$\square - 5 = 1$

$\square = 6$

$\heartsuit - 1 = 3$

$\heartsuit = 4$

$\triangle - 3 = 9$

$\triangle = 12$

$\diamond - 7 = 4$

$\diamond = 11$

$7 - \triangle = 2$

$\triangle = 5$

$\spadesuit - 9 = 4$

$\spadesuit = 13$

$\odot - 1 = 1$

$\odot = 2$

$3 - \heartsuit = 2$

$\heartsuit = 1$

$7 - \odot = 2$

$\odot = 5$

$\times - 6 = 6$

$\times = 12$

$12 - \diamond = 8$

$\diamond = 4$

$2 - \square = 1$

$\square = 1$

$8 - \spadesuit = 7$

$\spadesuit = 1$

$\diamond - 6 = 8$

$\diamond = 14$

$9 - \diamond = 4$

$\diamond = 5$

$\nabla - 7 = 4$

$\nabla = 11$

$12 - \blacklozenge = 6$

$\blacklozenge = 6$

$6 - \spadesuit = 1$

$\spadesuit = 5$

$\cup - 3 = 1$

$\cup = 4$

$11 - \cup = 9$

$\cup = 2$

$4 - \nabla = 2$

$\nabla = 2$

$7 - \square = 5$

$\square = 2$

$\diamond - 4 = 6$

$\diamond = 10$

$14 - \blacksquare = 5$

$\blacksquare = 9$

$\diamond - 8 = 7$

$\diamond = 15$

$9 - \cup = 8$

$\cup = 1$

$\ast - 4 = 5$

$\ast = 9$

$\ast - 8 = 7$

$\ast = 15$

$10 - \square = 4$

$\square = 6$