Name:

Date: _____

Inverse operations: Answers

(1)
$$\frac{x}{7} = 7$$

$$\frac{x}{7} \times 7 = 7 \times 7$$

$$x = 49$$

(9)
$$x - 9 = 3 x - 9 + 9 = 3 + 9 x = 12$$

(2)
$$x - 3 = 9 x - 3 + 3 = 9 + 3 x = 12$$

(10)
$$10x = 60$$
$$\frac{10x}{10} = \frac{60}{10}$$
$$x = 6$$

(3)
$$x - 7 = 8 x - 7 + 7 = 8 + 7 x = 15$$

(11)
$$9x = 63$$
$$\frac{9x}{9} = \frac{63}{9}$$
$$x = 7$$

$$\frac{x}{9} = 6$$

$$\frac{x}{9} \times 9 = 6 \times 9$$

$$x = 54$$

(5)
$$\frac{x}{3} = 8$$

$$\frac{x}{3} \times 3 = 8 \times 3$$

$$x = 24$$

(13)
$$x - 2 = 5 x - 2 + 2 = 5 + 2 x = 7$$

(6)
$$x - 2 = 9$$

$$x - 2 + 2 = 9 + 2$$

$$x = 11$$

(14)
$$3x = 15$$
$$\frac{3x}{3} = \frac{15}{3}$$
$$x = 5$$

(7)
$$x - 6 = 5$$

$$x - 6 + 6 = 5 + 6$$

$$x = 11$$

(15)
$$\frac{x}{6} = 2$$

$$\frac{x}{6} \times 6 = 2 \times 6$$

$$x = 12$$

(8)
$$3x = 18$$
$$\frac{3x}{3} = \frac{18}{3}$$
$$x = 6$$

(16)
$$x - 2 = 8$$

$$x - 2 + 2 = 8 + 2$$

$$x = 10$$

(17)
$$\frac{x}{5} = 9$$

$$\frac{x}{5} \times 5 = 9 \times 5$$

$$x = 45$$

$$(25)$$

$$\frac{x}{3} = 10$$

$$\frac{x}{3} \times 3 = 10 \times 3$$

$$x = 30$$

(18)
$$x + 2 = 9$$
 (26) $x - 8 = 4$ $x - 8 + 8 = 4 + 8$ $x = 7$ $x = 12$

(20)
$$\frac{x}{10} = 4$$

$$\frac{x}{10} \times 10 = 4 \times 10$$

$$x = 40$$

$$(28) \qquad \frac{x}{10} = 10$$

$$\frac{x}{10} \times 10 = 10 \times 10$$

$$x = 100$$

(22)
$$x-3=9$$
 (30) $x-10=5$ $x-10+10=5+10$ $x=12$ $x=15$

(23)
$$x + 8 = 4 x + 8 - 8 = 4 - 8 x = -4$$
 (31)
$$2x = 16 \frac{2x}{2} = \frac{16}{2}$$

$$x = 8$$

(24)
$$2x = 8 \\ \frac{2x}{2} = \frac{8}{2} \\ x = 4$$
 (32)
$$\frac{x}{10} = 2 \\ \frac{x}{10} \times 10 = 2 \times 10$$

$$x = 20$$

(33)
$$\frac{x}{2} = 8$$

$$\frac{x}{2} \times 2 = 8 \times 2$$

$$x = 16$$

$$(41)$$

$$\frac{x}{8} = 5$$

$$\frac{x}{8} \times 8 = 5 \times 8$$

$$x = 40$$

(34)
$$x-6=1$$
 $x-8=3$ $x-8+8=3+8$ $x=7$ $x=11$

(35)
$$x-9=2$$
 $x+6=2$ $x+6-6=2-6$ $x=11$ $x=-4$

(36)
$$x-8=3$$
 $x-1=3$ $x-1+1=3+1$ $x=11$ $x=4$

(37)
$$7x = 42 \frac{7x}{7} = \frac{42}{7} x = 6$$

$$(45) x - 7 = 3 x - 7 + 7 = 3 + 7 x = 10$$

(38)
$$\frac{x}{4} = 3 \qquad (46) \qquad x + 10 = 3 \\ x + 10 - 10 = 3 - 10 \\ x = -7 \qquad x = 12 \qquad (47)$$

x = 6

(49)
$$x - 1 = 9$$

$$x - 1 + 1 = 9 + 1$$

$$x = 10$$

$$(57) \qquad 8x = 72$$

$$\frac{8x}{8} = \frac{72}{8}$$

$$x = 9$$

(50)
$$x-6=3$$

 $x-6+6=3+6$
 $x=9$ (58) $\frac{x}{2}=7$
 $\frac{x}{2}\times 2=7\times 2$
 $x=14$

(51)
$$\frac{x}{9} = 6$$

$$\frac{x}{9} \times 9 = 6 \times 9$$

$$x = 54$$

$$(59)$$

$$x - 6 = 3$$

$$x - 6 + 6 = 3 + 6$$

$$x = 9$$

(52)
$$x - 9 = 2 x - 9 + 9 = 2 + 9 x = 11$$
 (60)
$$x + 4 = 3 x + 4 - 4 = 3 - 4 x = -1$$

(53)
$$x + 7 = 1 x + 7 - 7 = 1 - 7 x = -6$$
 (61)
$$x + 9 = 5 x + 9 - 9 = 5 - 9 x = -4$$

(55)
$$x - 2 = 8 x - 2 + 2 = 8 + 2 x = 10$$
 (63)
$$x - 2 = 5 x - 2 + 2 = 5 + 2 x = 7$$

(56)
$$x - 6 = 1 x - 6 + 6 = 1 + 6 x = 7$$
 (64)
$$3x = 15 \frac{3x}{3} = \frac{15}{3}$$

$$x = 5$$

(65)
$$x + 6 = 8 x + 6 - 6 = 8 - 6 x = 2$$
 (73)
$$x - 9 = 4 x - 9 + 9 = 4 + 9 x = 13$$

(66)
$$x - 9 = 3$$
 (74) $\frac{x}{9} = 3$ $x - 9 + 9 = 3 + 9$ $x = 12$ $\frac{x}{9} \times 9 = 3 \times 9$ $x = 27$

(67)
$$x - 8 = 7 x - 8 + 8 = 7 + 8 x = 15$$
 (75)
$$x + 8 = 9 x + 8 - 8 = 9 - 8 x = 1$$

(68)
$$x - 8 = 1 x - 8 + 8 = 1 + 8 x = 9$$
 (76)
$$x + 3 = 3 x + 3 - 3 = 3 - 3 x = 0$$

(69)
$$x - 7 = 2 x - 7 + 7 = 2 + 7 x = 9$$
 (77)
$$x + 10 = 5 x + 10 - 10 = 5 - 10 x = -5$$

(70)
$$\frac{x}{7} = 3$$

$$\frac{x}{7} \times 7 = 3 \times 7$$

$$x = 21$$

$$(78)$$

$$7x = 14$$

$$\frac{7x}{7} = \frac{14}{7}$$

$$x = 2$$

(71)
$$4x = 40
\frac{4x}{4} = \frac{40}{4}
x = 10$$
(79)
$$x - 9 = 4
x - 9 + 9 = 4 + 9
x = 13$$

(72)
$$x-6=2 x-6+6=2+6 x=8$$
 (80)
$$x-10=3 x-10+10=3+10 x=13$$

(82)
$$x + 10 = 5$$

$$x + 10 - 10 = 5 - 10$$

$$x = -5$$

$$(90) \qquad 6x = 54$$

$$\frac{6x}{6} = \frac{54}{6}$$

$$x = 9$$

(83)
$$x - 7 = 2 x - 7 + 7 = 2 + 7 x = 9$$
 (91)
$$x + 3 = 2 x + 3 - 3 = 2 - 3$$

$$x = -1$$

(84)
$$\frac{x}{10} = 8$$

$$\frac{x}{10} \times 10 = 8 \times 10$$

$$x = 80$$

$$x = -1$$

$$x + 2 = 2$$

$$x + 2 - 2 = 2 - 2$$

$$x = 0$$

(85)
$$\frac{x}{7} = 4$$

$$\frac{x}{7} \times 7 = 4 \times 7$$

$$x = 28$$

$$(93) \qquad x + 10 = 7$$

$$x + 10 - 10 = 7 - 10$$

$$x = -3$$

(86)
$$6x = 12$$

$$\frac{6x}{6} = \frac{12}{6}$$

$$x = 2$$

$$(94)$$

$$\frac{x}{6} = 9$$

$$\frac{x}{6} \times 6 = 9 \times 6$$

$$x = 54$$

(88)
$$2x = 16
\frac{2x}{2} = \frac{16}{2}
x = 8$$
(96)
$$x + 7 = 2
x + 7 - 7 = 2 - 7
x = -5$$