Date:

Inverse operations: Answers

(1)
$$2x + 5 = 7$$
$$2x + 5 - 5 = 7 - 5$$
$$2x = 2$$
$$\frac{2x}{2} = \frac{2}{2}$$
$$x = 1$$

(6)
$$7x + 6 = 13$$
$$7x + 6 - 6 = 13 - 6$$
$$7x = 7$$
$$\frac{7x}{7} = \frac{7}{7}$$
$$x = 1$$

(2)
$$9x + 2 = 83$$

$$9x + 2 - 2 = 83 - 2$$

$$9x = 81$$

$$\frac{9x}{9} = \frac{81}{9}$$

$$x = 9$$

$$3x + 9 = 39$$
$$3x + 9 - 9 = 39 - 9$$
$$3x = 30$$
$$\frac{3x}{3} = \frac{30}{3}$$
$$x = 10$$

(3)
$$10x + 1 = 71$$
$$10x + 1 - 1 = 71 - 1$$
$$10x = 70$$
$$\frac{10x}{10} = \frac{70}{10}$$
$$x = 7$$

(8)
$$9x + 1 = 19$$
$$9x + 1 - 1 = 19 - 1$$
$$9x = 18$$
$$\frac{9x}{9} = \frac{18}{9}$$
$$x = 2$$

(4)
$$5x + 10 = 45$$
$$5x + 10 - 10 = 45 - 10$$
$$5x = 35$$
$$\frac{5x}{5} = \frac{35}{5}$$
$$x = 7$$

$$2x + 10 = 20$$

$$2x + 10 - 10 = 20 - 10$$

$$2x = 10$$

$$\frac{2x}{2} = \frac{10}{2}$$

$$x = 5$$

(5)
$$8x + 3 = 51 \\ 8x + 3 - 3 = 51 - 3 \\ 8x = 48 \\ \frac{8x}{8} = \frac{48}{8} \\ x = 6$$

(10)
$$3x + 6 = 21$$
$$3x + 6 - 6 = 21 - 6$$
$$3x = 15$$
$$\frac{3x}{3} = \frac{15}{3}$$
$$x = 5$$

(9)

(11)
$$6x + 3 = 39$$

$$6x + 3 = 39 - 3$$

$$6x = 36$$

$$\frac{6x}{6} = \frac{36}{6}$$

$$x = 6$$
(12)
$$3x + 8 = 10$$
(16)
$$4x + 8 = 44$$

$$4x + 8 - 8 = 44 - 8$$

$$4x = 36$$

$$\frac{4x}{4} = \frac{36}{4}$$

$$x = 9$$

(12)
$$2x + 8 = 10
2x + 8 - 8 = 10 - 8
2x = 2
$$\frac{2x}{2} = \frac{2}{2}
x = 1$$
(17)
$$5x + 5 = 20
5x + 5 - 5 = 20 - 5
$$\frac{5x}{5} = \frac{15}{5}
x = 3$$$$$$

(13)
$$7x + 4 = 46$$

$$7x + 4 - 4 = 46 - 4$$

$$7x = 42$$

$$\frac{7x}{7} = \frac{42}{7}$$

$$x = 6$$
(18)
$$9x + 6 = 33$$

$$9x + 6 - 6 = 33 - 6$$

$$9x = 27$$

$$\frac{9x}{9} = \frac{27}{9}$$

$$x = 3$$

(14)
$$9x + 4 = 40$$

$$9x + 4 - 4 = 40 - 4$$

$$9x = 36$$

$$\frac{9x}{9} = \frac{36}{9}$$

$$x = 4$$

$$(19) \qquad 6x + 6 = 48$$

$$6x + 6 - 6 = 48 - 6$$

$$\frac{6x}{6} = \frac{42}{6}$$

$$x = 7$$

(15)
$$4x + 10 = 34$$

$$4x + 10 - 10 = 34 - 10$$

$$4x = 24$$

$$\frac{4x}{4} = \frac{24}{4}$$

$$x = 6$$
(20)
$$9x + 8 = 53$$

$$9x + 8 - 8 = 53 - 8$$

$$9x = 45$$

$$\frac{9x}{9} = \frac{45}{9}$$

$$x = 5$$

Date:

Inverse operations: Answers

(1)
$$7x - 10 = 18$$
$$7x - 10 + 10 = 18 + 10$$
$$7x = 28$$
$$\frac{7x}{7} = \frac{28}{7}$$
$$x = 4$$

(6)
$$7x - 5 = 58$$
$$7x - 5 + 5 = 58 + 5$$
$$7x = 63$$
$$\frac{7x}{7} = \frac{63}{7}$$
$$x = 9$$

(2)
$$6x - 7 = 29$$

$$6x - 7 + 7 = 29 + 7$$

$$6x = 36$$

$$\frac{6x}{6} = \frac{36}{6}$$

$$x = 6$$

$$2x - 5 = 1$$

$$2x - 5 + 5 = 1 + 5$$

$$2x = 6$$

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

$$x = 3$$

(3)
$$10x - 4 = 16$$
$$10x - 4 + 4 = 16 + 4$$
$$10x = 20$$
$$\frac{10x}{10} = \frac{20}{10}$$
$$x = 2$$

$$3x - 8 = 10$$
$$3x - 8 + 8 = 10 + 8$$
$$3x = 18$$
$$\frac{3x}{3} = \frac{18}{3}$$
$$x = 6$$

$$3x - 9 = 9$$

$$3x - 9 + 9 = 9 + 9$$

$$3x = 18$$

$$\frac{3x}{3} = \frac{18}{3}$$

$$x = 6$$

(9)
$$6x - 1 = 23$$
$$6x - 1 + 1 = 23 + 1$$
$$6x = 24$$
$$\frac{6x}{6} = \frac{24}{6}$$
$$x = 4$$

(5)
$$5x - 3 = 7$$

$$5x - 3 + 3 = 7 + 3$$

$$5x = 10$$

$$\frac{5x}{5} = \frac{10}{5}$$

$$x = 2$$

(10)
$$5x - 4 = 11$$
$$5x - 4 + 4 = 11 + 4$$
$$5x = 15$$
$$\frac{5x}{5} = \frac{15}{5}$$
$$x = 3$$

(8)

(11)
$$8x - 1 = 23$$

$$8x - 1 + 1 = 23 + 1$$

$$8x = 24$$

$$\frac{8x}{8} = \frac{24}{8}$$

$$x = 3$$
(16)
$$7x - 6 = 57$$

$$7x - 6 + 6 = 57 + 6$$

$$7x = 63$$

$$\frac{7x}{7} = \frac{63}{7}$$

$$x = 9$$

(12)
$$10x - 4 = 36$$

$$10x - 4 + 4 = 36 + 4$$

$$10x = 40$$

$$\frac{10x}{10} = \frac{40}{10}$$

$$x = 4$$

$$(17) \qquad 6x - 3 = 33$$

$$6x - 3 + 3 = 33 + 3$$

$$\frac{6x}{6} = \frac{36}{6}$$

$$x = 6$$

(13)
$$9x - 2 = 52$$

$$9x - 2 + 2 = 52 + 2$$

$$9x = 54$$

$$\frac{9x}{9} = \frac{54}{9}$$

$$x = 6$$
(18)
$$2x - 1 = 13$$

$$2x - 1 + 1 = 13 + 1$$

$$\frac{2x}{2} = \frac{14}{2}$$

$$x = 7$$

(14)
$$9x - 3 = 60$$

$$9x - 3 = 60 + 3$$

$$9x - 3 + 3 = 60 + 3$$

$$9x = 63$$

$$\frac{9x}{9} = \frac{63}{9}$$

$$x = 7$$
(19)
$$6x - 8 = 10$$

$$6x - 8 + 8 = 10 + 8$$

$$\frac{6x}{6} = 18$$

$$\frac{6x}{6} = \frac{18}{6}$$

$$x = 3$$

(15)
$$4x - 5 = 23$$

$$4x - 5 + 5 = 23 + 5$$

$$4x = 28$$

$$\frac{4x}{4} = \frac{28}{4}$$

$$x = 7$$
(20)
$$4x - 7 = -3$$

$$4x - 7 + 7 = -3 + 7$$

$$4x = 4$$

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

$$x = 1$$

Date:

Inverse operations: Answers

(1)
$$\frac{x}{4} + 2 = 9$$

$$\frac{x}{4} + 2 - 2 = 9 - 2$$

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

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

(7)

$$\frac{x}{6} + 5 = 9$$

$$\frac{x}{6} + 5 - 5 = 9 - 5$$

$$\frac{x}{6} = 4$$

$$\frac{x}{6} \times 6 = 4 \times 6$$

$$x = 24$$

(2)
$$\frac{x}{10} + 8 = 15$$
$$\frac{x}{10} + 8 - 8 = 15 - 8$$
$$\frac{x}{10} = 7$$
$$\frac{x}{10} \times 10 = 7 \times 10$$
$$x = 70$$

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

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

$$\frac{x}{10} = 7$$

$$\frac{x}{10} \times 10 = 7 \times 10$$

$$x = 70$$

(3)
$$\frac{x}{7} + 2 = 7$$

$$\frac{x}{7} + 2 - 2 = 7 - 2$$

$$\frac{x}{7} = 5$$

$$\frac{x}{7} \times 7 = 5 \times 7$$

$$x = 35$$

(8)
$$\frac{x}{3} + 3 = 13$$
$$\frac{x}{3} + 3 - 3 = 13 - 3$$
$$\frac{x}{3} = 10$$
$$\frac{x}{3} \times 3 = 10 \times 3$$
$$x = 30$$

(4)
$$\frac{x}{4} + 4 = 8$$

$$\frac{x}{4} + 4 - 4 = 8 - 4$$

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

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

$$x = 16$$

(9)
$$\frac{x}{10} + 5 = 13$$
$$\frac{x}{10} + 5 - 5 = 13 - 5$$
$$\frac{x}{10} = 8$$
$$\frac{x}{10} \times 10 = 8 \times 10$$
$$x = 80$$

(5)
$$\frac{x}{2} + 3 = 7$$

$$\frac{x}{2} + 3 - 3 = 7 - 3$$

$$\frac{x}{2} = 4$$

$$\frac{x}{2} \times 2 = 4 \times 2$$

$$x = 8$$

(10)
$$\frac{x}{7} + 4 = 12$$

$$\frac{x}{7} + 4 - 4 = 12 - 4$$

$$\frac{x}{7} = 8$$

$$\frac{x}{7} \times 7 = 8 \times 7$$

$$x = 56$$

$$\frac{x}{3} + 1 = 9 \qquad (16) \qquad \frac{x}{10} + 8 = 16 \\
\frac{x}{3} + 1 - 1 = 9 - 1 \qquad \frac{x}{10} + 8 - 8 = 16 - 8 \\
\frac{x}{3} + 3 = 8 \qquad \frac{x}{10} + 8 - 8 = 16 - 8 \\
\frac{x}{3} \times 3 = 8 \times 3 \qquad x = 24 \qquad x = 80$$

$$(12) \qquad \frac{x}{9} + 8 = 16 \qquad (17) \qquad \frac{x}{6} + 5 = 8 \\
\frac{x}{9} + 8 - 8 = 16 - 8 \qquad \frac{x}{6} + 5 - 5 = 8 - 5 \\
\frac{x}{9} = 8 \qquad \frac{x}{6} \times 9 = 8 \times 9 \qquad \frac{x}{6} \times 6 = 3 \times 6 \\
x = 72 \qquad x = 18$$

$$(13) \qquad \frac{x}{3} + 7 = 9 \qquad (18) \qquad \frac{x}{2} + 10 - 20 \qquad x = 18$$

$$(13) \qquad \frac{x}{3} + 7 - 7 = 9 - 7 \qquad \frac{x}{2} + 10 - 10 = 20 - 10 \qquad x = 10$$

$$\frac{x}{3} \times 3 = 2 \times 3 \qquad x = 6 \qquad x = 20$$

$$(14) \qquad \frac{x}{10} + 4 = 8 \qquad (19) \qquad \frac{x}{9} + 4 = 8 \qquad x = 20$$

$$(14) \qquad \frac{x}{10} + 4 - 4 = 8 - 4 \qquad \frac{x}{9} + 4 - 4 = 8 - 4 \qquad x = 36$$

$$(15) \qquad \frac{x}{2} + 5 - 5 = 10 - 5 \qquad \frac{x}{7} + 4 = 8 \qquad x = 4$$

$$\frac{x}{7} + 4 - 4 = 8 - 4 \qquad x = 36$$

$$\frac{x}{7} + 4 - 4 = 8 - 4 \qquad x = 36$$

$$\frac{x}{7} + 4 - 4 = 8 - 4 \qquad x = 36$$

$$\frac{x}{7} + 4 - 4 = 8 - 4 \qquad x = 36$$

$$\frac{x}{7} + 4 - 4 = 8 - 4 \qquad x = 36$$

$$\frac{x}{7} + 4 - 4 = 8 - 4 \qquad x = 4$$

$$\frac{x}{7} + 4 - 4 = 8 - 4 \qquad x = 36$$

$$\frac{x}{7} + 4 - 4 = 8 - 4 \qquad x = 36$$

$$\frac{x}{7} + 4 - 4 = 8 - 4 \qquad x = 36$$

 $\frac{x}{2} \times 2 = 5 \times 2$

x = 10

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

x = 28

Date:

Inverse operations: Answers

(1)
$$\frac{x}{10} - 10 = -2$$

$$\frac{x}{10} - 10 + 10 = -2 + 10$$

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

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

$$\frac{x}{10} - 10 = -2$$

$$\frac{x}{10} - 10 + 10 = -2 + 10$$

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

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

$$x = 80$$
(6)

(2)
$$\frac{x}{8} - 5 = -2$$

$$\frac{x}{8} - 5 + 5 = -2 + 5$$

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

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

$$x = 24$$

(3)
$$\frac{x}{7} - 2 = 2$$

$$\frac{x}{7} - 2 + 2 = 2 + 2$$

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

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

$$x = 28$$

(4)
$$\frac{x}{8} - 4 = 0$$

$$\frac{x}{8} - 4 + 4 = 0 + 4$$

$$\frac{x}{8} = 4$$

$$\frac{x}{8} \times 8 = 4 \times 8$$

$$x = 32$$

(5)
$$\frac{x}{3} - 10 = -4$$

$$\frac{x}{3} - 10 + 10 = -4 + 10$$

$$\frac{x}{3} = 6$$

$$\frac{x}{3} \times 3 = 6 \times 3$$

$$x = 18$$

$$\frac{x}{5} - 3 = 2$$

$$\frac{x}{5} - 3 + 3 = 2 + 3$$

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

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

$$x = 25$$

$$\frac{x}{7} - 4 = 2$$

$$\frac{x}{7} - 4 + 4 = 2 + 4$$

$$\frac{x}{7} = 6$$

$$\frac{x}{7} \times 7 = 6 \times 7$$

$$x = 42$$

$$\frac{x}{8} - 7 = 3$$

$$\frac{x}{8} - 7 + 7 = 3 + 7$$

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

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

$$x = 80$$

$$\frac{x}{4} - 1 = 8$$

$$\frac{x}{4} - 1 + 1 = 8 + 1$$

$$\frac{x}{4} = 9$$

$$\frac{x}{4} \times 4 = 9 \times 4$$

$$x = 36$$

$$\frac{x}{5} - 5 = -2$$

$$\frac{x}{5} - 5 + 5 = -2 + 5$$

$$\frac{x}{5} = 3$$

$$\frac{x}{5} \times 5 = 3 \times 5$$

$$x = 15$$

(10)

Date:

Inverse operations: Answers

(1)
$$5(x+5) = 60$$
$$\frac{5(x+5)}{5} = \frac{60}{5}$$
$$x+5 = 12$$
$$x+5-5 = 12-5$$
$$x = 7$$

(6)
$$4(x+1) = 8$$
$$\frac{4(x+1)}{4} = \frac{8}{4}$$
$$x+1=2$$
$$x+1-1=2-1$$
$$x=1$$

(2)
$$8(x+2) = 72$$
$$\frac{8(x+2)}{8} = \frac{72}{8}$$
$$x+2=9$$
$$x+2-2=9-2$$
$$x=7$$

(7)
$$9(x+8) = 153$$
$$\frac{9(x+8)}{9} = \frac{153}{9}$$
$$x+8 = 17$$
$$x+8-8 = 17-8$$
$$x = 9$$

(3)
$$6(x+5) = 48$$
$$\frac{6(x+5)}{6} = \frac{48}{6}$$
$$x+5 = 8$$
$$x+5-5 = 8-5$$
$$x = 3$$

(8)
$$2(x+6) = 26$$
$$\frac{2(x+6)}{2} = \frac{26}{2}$$
$$x+6 = 13$$
$$x+6-6 = 13-6$$
$$x = 7$$

(4)
$$3(x+9) = 33$$
$$\frac{3(x+9)}{3} = \frac{33}{3}$$
$$x+9=11$$
$$x+9-9=11-9$$
$$x=2$$

(9)
$$2(x+5) = 20$$
$$\frac{2(x+5)}{2} = \frac{20}{2}$$
$$x+5 = 10$$
$$x+5-5 = 10-5$$
$$x = 5$$

(5)
$$8(x+7) = 72$$
$$\frac{8(x+7)}{8} = \frac{72}{8}$$
$$x+7=9$$
$$x+7-7=9-7$$
$$x=2$$

(10)
$$4(x+6) = 64$$
$$\frac{4(x+6)}{4} = \frac{64}{4}$$
$$x+6 = 16$$
$$x+6-6 = 16-6$$
$$x = 10$$

(11)
$$10(x+9) = 190
\frac{10(x+9)}{10} = \frac{190}{10}
x+9=19
x+9-9=19-9
x=10
(16)
$$3(x+3) = 21
\frac{3(x+3)}{3} = \frac{21}{3}
x+3=7
x+3-3=7-3
x=4$$$$

(12)
$$10(x+4) = 130$$

$$\frac{10(x+4)}{10} = \frac{130}{10}$$

$$x+4=13$$

$$x+4-4=13-4$$

$$x=9$$
(17)
$$10(x+2) = 80$$

$$\frac{10(x+2)}{10} = \frac{80}{10}$$

$$x+2=8$$

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

$$x=6$$

(13)
$$5(x+4) = 60$$

$$\frac{5(x+4)}{5} = \frac{60}{5}$$

$$x+4=12$$

$$x+4-4=12-4$$

$$x=8$$
(18)
$$9(x+7) = 99$$

$$\frac{9(x+7)}{9} = \frac{99}{9}$$

$$x+7=11$$

$$x+7-7=11-7$$

(14)
$$3(x+10) = 57$$

$$\frac{3(x+10)}{3} = \frac{57}{3}$$

$$x+10 = 19$$

$$x+7 = 15$$

$$x+7-7 = 15-7$$

$$x=9$$
(19)
$$2(x+7) = 30$$

$$\frac{2(x+7)}{2} = \frac{30}{2}$$

$$x+7 = 15$$

$$x+7-7 = 15-7$$

(15)
$$5(x+3) = 30$$

$$\frac{5(x+3)}{5} = \frac{30}{5}$$

$$x+3=6$$

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

$$x=3$$
(20)
$$8(x+3) = 88$$

$$\frac{8(x+3)}{8} = \frac{88}{8}$$

$$x+3=11$$

$$x+3-3=11-3$$

$$x=8$$

Date:

x + 3 = 56

x = 53

Inverse operations: Answers

(1)
$$\frac{x+6}{4} = 3$$

$$\frac{x+6}{4} \times 4 = 3 \times 4$$

$$x+6 = 12$$

$$x+6-6 = 12-6$$

$$x = 6$$

$$\frac{x+6}{4} = 3$$

$$\frac{+6}{4} \times 4 = 3 \times 4$$

$$x+6 = 12$$

$$x+6-6=12-6$$

$$x=6$$
(6)
$$\frac{x+1}{2} = 7$$

$$x+1=14$$

$$x+1-1=14-1$$

$$x=13$$

(2)
$$\frac{x+6}{6} = 3$$

$$\frac{x+6}{6} \times 6 = 3 \times 6$$

$$x+6=18$$

$$x+6-6=18-6$$

$$x=12$$
(7)
$$\frac{x+3}{7} = 8$$

$$x+3 \times 7 = 8 \times 7$$

$$x+3=56$$

$$x+3-3=56-3$$

$$x=53$$

(3)
$$\frac{x+2}{10} = 5$$

$$\frac{x+2}{10} \times 10 = 5 \times 10$$

$$x+2 = 50$$

$$x+2-2 = 50-2$$

$$x = 48$$
(8)
$$\frac{x+1}{10} = 2$$

$$\frac{x+1}{10} \times 10 = 2 \times 10$$

$$x+1 = 20$$

$$x+1-1 = 20-1$$

$$x = 19$$

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

$$\frac{x+7}{4} \times 4 = 3 \times 4$$

$$x+7 = 12$$

$$x+7-7 = 12-7$$

$$x = 5$$
(9)
$$\frac{x+5}{3} = 7$$

$$x+5 = 21$$

$$x+5-5 = 21-5$$

$$x = 16$$

(5)
$$\frac{x+6}{7} = 2$$

$$\frac{x+6}{7} \times 7 = 2 \times 7$$

$$x+6 = 14$$

$$x+6-6 = 14-6$$

$$x=8$$
(10)
$$\frac{x+5}{2} = 10$$

$$x+5 = 20$$

$$x+5=20$$

$$x+5-5=20-5$$

$$x=15$$

(11)
$$\frac{x+8}{5} = 1 \qquad (16) \qquad \frac{x+5}{8} = 9$$

$$\frac{x+8}{5} \times 5 = 1 \times 5 \qquad \frac{x+5}{8} \times 8 = 9 \times 8$$

$$x+8=5 \qquad x+5=72$$

$$x+8-8=5-8 \qquad x+5-5=72-5$$

$$x=-3 \qquad x=67$$

(12)
$$\frac{x+7}{9} = 6$$

$$\frac{x+7}{9} \times 9 = 6 \times 9$$

$$x+7=54$$

$$x+7-7=54-7$$

$$x=47$$

$$(17) \qquad \frac{x+8}{2} = 4$$

$$\frac{x+8}{2} \times 2 = 4 \times 2$$

$$x+8=8$$

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

$$x=0$$

(13)
$$\frac{x+10}{10} = 2$$

$$\frac{x+10}{10} \times 10 = 2 \times 10$$

$$x+10=20$$

$$x+10=20$$

$$x+10-10=20-10$$

$$x=10$$
(18)
$$\frac{x+10}{8} = 3$$

$$x+10=24$$

$$x+10-10=24-10$$

$$x=14$$

(14)
$$\frac{x+10}{8} = 1$$

$$\frac{x+10}{8} \times 8 = 1 \times 8$$

$$x+10 = 8$$

$$x+10-10 = 8-10$$

$$x = -2$$
(19)
$$\frac{x+4}{9} = 8$$

$$x+4 = 72$$

$$x+4-4=72-4$$

$$x = 68$$

(15)
$$\frac{x+4}{5} = 5 \qquad (20) \qquad \frac{x+3}{9} = 5$$
$$\frac{x+4}{5} \times 5 = 5 \times 5 \qquad \frac{x+3}{9} \times 9 = 5 \times 9$$
$$x+4=25 \qquad x+3=45$$
$$x+4-4=25-4 \qquad x+3-3=45-3$$
$$x=21 \qquad x=42$$

Date: _____

Inverse operations: Answers

(1)
$$9(x-10) = -72$$
$$\frac{9(x-10)}{9} = \frac{-72}{9}$$
$$x-10 = -8$$
$$x-10+10 = -8+10$$
$$x = 2$$

(6)
$$5(x-10) = -45$$
$$\frac{5(x-10)}{5} = \frac{-45}{5}$$
$$x-10 = -9$$
$$x-10+10 = -9+10$$
$$x = 1$$

(2)
$$2(x-7) = 4$$
$$\frac{2(x-7)}{2} = \frac{4}{2}$$
$$x-7 = 2$$
$$x-7+7 = 2+7$$
$$x = 9$$

(7)
$$10(x-8) = -20$$
$$\frac{10(x-8)}{10} = \frac{-20}{10}$$
$$x-8 = -2$$
$$x-8+8 = -2+8$$
$$x = 6$$

(3)
$$7(x-6) = -14$$
$$\frac{7(x-6)}{7} = \frac{-14}{7}$$
$$x-6 = -2$$
$$x-6+6 = -2+6$$
$$x = 4$$

(8)
$$6(x-4) = 30$$
$$\frac{6(x-4)}{6} = \frac{30}{6}$$
$$x-4=5$$
$$x-4+4=5+4$$
$$x=9$$

(4)
$$9(x - 10) = 0$$
$$\frac{9(x - 10)}{9} = \frac{0}{9}$$
$$x - 10 = 0$$
$$x - 10 + 10 = 0 + 10$$
$$x = 10$$

(9)
$$2(x-8) = -10$$
$$\frac{2(x-8)}{2} = \frac{-10}{2}$$
$$x-8 = -5$$
$$x-8+8 = -5+8$$
$$x = 3$$

(5)
$$4(x-3) = 8$$
$$\frac{4(x-3)}{4} = \frac{8}{4}$$
$$x-3 = 2$$
$$x-3+3 = 2+3$$
$$x = 5$$

(10)
$$7(x-6) = 14$$
$$\frac{7(x-6)}{7} = \frac{14}{7}$$
$$x-6=2$$
$$x-6+6=2+6$$
$$x=8$$

(11)
$$3(x-1) = 9
\frac{3(x-1)}{3} = \frac{9}{3}
x-1=3
x-1+1=3+1
x=4$$
(16)
$$10(x-4) = -10
\frac{10(x-4)}{10} = \frac{-10}{10}
x-4=-1
x-4+4=-1+4
x=3$$

(12)
$$9(x-4) = 54$$

$$\frac{9(x-4)}{9} = \frac{54}{9}$$

$$x-4=6$$

$$x-4+4=6+4$$

$$x=10$$

$$(17) \qquad 5(x-2) = 15$$

$$\frac{5(x-2)}{5} = \frac{15}{5}$$

$$x-2=3$$

$$x-2+2=3+2$$

$$x=5$$

(13)
$$7(x-10) = -56$$

$$\frac{7(x-10)}{7} = \frac{-56}{7}$$

$$x-10 = -8$$

$$x-10+10 = -8+10$$

$$x = 2$$
(18)
$$6(x-2) = 30$$

$$\frac{6(x-2)}{6} = \frac{30}{6}$$

$$x-2 = 5$$

$$x-2+2 = 5+2$$

$$x = 7$$

(14)
$$10(x-2) = 0
\frac{10(x-2)}{10} = \frac{0}{10}
x-2=0
x-2+2=0+2
x=2$$
(19)
$$2(x-9) = -14
\frac{2(x-9)}{2} = \frac{-14}{2}
x-9=-7
x-9+9=-7+9
x=2$$

(15)
$$3(x-1) = 9$$

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

$$x-1=3$$

$$x-1+1=3+1$$

$$x=4$$
(20)
$$10(x-8) = -70$$

$$\frac{10(x-8)}{10} = \frac{-70}{10}$$

$$x-8=-7$$

$$x-8+8=-7+8$$

Date: _____

Inverse operations: Answers

(1)
$$\frac{x-3}{4} = 4$$

$$\frac{x-3}{4} \times 4 = 4 \times 4$$

$$x-3 = 16$$

$$x-3+3 = 16+3$$

$$x = 15$$

(7)

(8)

(2)
$$\frac{x-7}{6} = 3$$

$$\frac{x-7}{6} \times 6 = 3 \times 6$$

$$x-7 = 18$$

$$x-7+7 = 18+7$$

$$x = 49$$

$$\frac{x-9}{4} = 5$$

$$\frac{x-9}{4} \times 4 = 5 \times 4$$

$$x-9 = 20$$

$$x-9+9 = 20+9$$

$$x = 45$$

(3)
$$\frac{x-10}{3} = 8$$

$$\frac{x-10}{3} \times 3 = 8 \times 3$$

$$x-10 = 24$$

$$x-10+10 = 24+10$$

$$x = 40$$

$$\frac{x-7}{10} = 2$$

$$\frac{x-7}{10} \times 10 = 2 \times 10$$

$$x-7 = 20$$

$$x-7+7 = 20+7$$

$$x = 77$$

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

$$\frac{x-4}{3} \times 3 = 7 \times 3$$

$$x-4 = 21$$

$$x-4+4 = 21+4$$

$$x = 16$$

(9)
$$\frac{x-8}{10} = 2$$

$$\frac{x-8}{10} \times 10 = 2 \times 10$$

$$x-8 = 20$$

$$x-8+8 = 20+8$$

$$x = 88$$

(5)
$$\frac{x-2}{3} = 3$$

$$\frac{x-2}{3} \times 3 = 3 \times 3$$

$$x-2 = 9$$

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

$$x = 8$$

(10)
$$\frac{x-4}{8} = 1$$

$$\frac{x-4}{8} \times 8 = 1 \times 8$$

$$x-4=8$$

$$x-4+4=8+4$$

$$x=36$$

(11)
$$\frac{x-7}{5} = 6 \qquad (16) \qquad \frac{x-7}{9} = 4$$

$$\frac{x-7}{5} \times 5 = 6 \times 5 \qquad \frac{x-7}{9} \times 9 = 4 \times 9$$

$$x-7 = 30 \qquad x-7 = 36$$

$$x-7+7=30+7 \qquad x=42 \qquad x=70$$

(12)
$$\frac{x-4}{4} = 2$$

$$\frac{x-4}{4} \times 4 = 2 \times 4$$

$$x-4=8$$

$$x-4+4=8+4$$

$$x=20$$

$$(17) \qquad \frac{x-2}{7} = 5$$

$$x-2=35$$

$$x-2=35$$

$$x-2+2=35+2$$

$$x=16$$

(13)
$$\frac{x-4}{10} = 5$$

$$\frac{x-4}{10} \times 10 = 5 \times 10$$

$$x-4 = 50$$

$$x-4+4=50+4$$

$$x=44$$

$$(18) \qquad \frac{x-3}{10} = 7$$

$$x-3=70$$

$$x-3=70$$

$$x-3+3=70+3$$

$$x=33$$

(14)
$$\frac{x-5}{10} = 3$$

$$\frac{x-5}{10} \times 10 = 3 \times 10$$

$$x-5 = 30$$

$$x-5+5=30+5$$

$$x=55$$
(19)
$$\frac{x-8}{3} = 3$$

$$x-8 = 9$$

$$x-8+8=9+8$$

$$x=32$$

(15)
$$\frac{x-1}{6} = 4$$

$$\frac{x-1}{6} \times 6 = 4 \times 6$$

$$x-1 = 24$$

$$x-1+1=24+1$$

$$x=7$$

$$(20) \qquad \frac{x-2}{3} = 4$$

$$\frac{x-2}{3} \times 3 = 4 \times 3$$

$$x-2 = 12$$

$$x-2+2=12+2$$

$$x=8$$