Date: _____

Inverse operations: Answers

(1)

(8)

(9)

(10)

(11)

(12)

$$x + 10 = 9$$

$$x + 10 - 10 = 9 - 10$$

$$x = -1$$

$$x + 1 = 10$$

$$x + 1 - 1 = 10 - 1$$

$$x = 9$$

(2)

$$x+6=9$$
$$x+6-6=9-6$$
$$x=3$$

$$x + 7 = 4$$

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

$$x = -3$$

(3)

$$x + 7 = 9$$
$$x + 7 - 7 = 9 - 7$$
$$x = 2$$

$$x + 9 = 10$$
$$x + 9 - 9 = 10 - 9$$
$$x = 1$$

(4)

$$x + 5 = 4$$
$$x + 5 - 5 = 4 - 5$$
$$x = -1$$

$$x + 3 = 4$$
$$x + 3 - 3 = 4 - 3$$
$$x = 1$$

(5)

$$x+9=6$$

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

$$x=-3$$

$$x + 2 = 7$$

$$x + 2 - 2 = 7 - 2$$

$$x = 5$$

(6)

$$x+4=1$$

$$x+4-4=1-4$$

$$x=-3$$

$$x+7=4$$

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

$$x=-3$$

x + 1 = 5 x + 10 = 3 x + 1 - 1 = 5 - 1 x + 10 - 10 = 3 - 10x = 4 x = -7

(14) (20)

x + 3 = 1 x + 3 = 3 x + 3 - 3 = 1 - 3 x = -2 x = 0

(15) x + 9 = 10 x + 2 = 8

x + 9 - 10 x + 2 - 8 x + 9 - 9 = 10 - 9 x = 1 x + 2 - 2 = 8 - 2x = 6

(16) (22)

x + 6 = 9 x + 5 = 7 x + 6 - 6 = 9 - 6 x + 5 - 5 = 7 - 5x = 3 x = 2

(17) (23)

x + 5 = 3 x + 7 = 4 x + 5 - 5 = 3 - 5 x + 7 - 7 = 4 - 7x = -2 x = -3

(18) (24)

x + 5 = 2 x + 9 = 1 x + 5 - 5 = 2 - 5 x + 9 - 9 = 1 - 9x = -3 x = -8

Date: _____

Inverse operations: Answers

(1)

(7)

(8)

(9)

(10)

(11)

(12)

$$x-6=4$$

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

$$x=10$$

x-5=9x-5+5=9+5x=14

(2)

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

x = 15

x-4=7 x-4+4=7+4 x=11

(3)

$$x - 8 = 2$$
$$x - 8 + 8 = 2 + 8$$
$$x = 10$$

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

(4)

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

x - 1 = 6x - 1 + 1 = 6 + 1x = 7

(5)

$$x-2=7$$

$$x-2+2=7+2$$

$$x=9$$

x - 8 = 2 x - 8 + 8 = 2 + 8 x = 10

(6)

$$x-4=9$$

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

$$x=13$$

x-4=9 x-4+4=9+4 x=13

x - 10 = 10 x - 8 = 3 x - 10 + 10 = 10 + 10 x - 8 + 8 = 3 + 8x = 20 x = 11

(14) (20)

x-1=8 x-10=7 x-1+1=8+1 x=9 x=17

(15) (21)

x-4=2 x-3=4 x-4+4=2+4 x=6 x=7

(16) (22)

x-5=4 x-5=4 x-5=4 x-5+5=4+5 x=9 x=9

(17) (23)

x-4=9 x-9=5x-4+4=9+4 x=13 x=14

(18) (24)

x-1=3 x-9=4x-1+1=3+1 x=4 x=13 Name: ____

Date: _____

Inverse operations: Answers

(1)

$$4x = 32$$

$$\frac{4x}{4} = \frac{32}{4}$$

$$x = 8$$

(7)

$$8x = 16$$
$$\frac{8x}{8} = \frac{16}{8}$$
$$x = 2$$

(2)

$$2x = 20$$

$$\frac{2x}{2} = \frac{20}{2}$$

$$x = 10$$

(8)

$$7x = 35$$

$$\frac{7x}{7} = \frac{35}{7}$$

$$x = 5$$

(3)

$$4x = 12$$

$$\frac{4x}{4} = \frac{12}{4}$$

$$x = 3$$

(9)

$$8x = 16$$

$$\frac{8x}{8} = \frac{16}{8}$$

$$x = 2$$

(4)

$$6x = 24$$
$$\frac{6x}{6} = \frac{24}{6}$$
$$x = 4$$

(10)

$$2x = 6$$
$$\frac{2x}{2} = \frac{6}{2}$$
$$x = 3$$

(5)

$$9x = 90$$
$$\frac{9x}{9} = \frac{90}{9}$$
$$x = 10$$

(11)

$$9x = 72$$
$$\frac{9x}{9} = \frac{72}{9}$$
$$x = 8$$

(6)

$$9x = 63$$
$$\frac{9x}{9} = \frac{63}{9}$$
$$x = 7$$

(12)

$$4x = 40$$
$$\frac{4x}{4} = \frac{40}{4}$$
$$x = 10$$

(13)(19)5x = 505x = 35 $\frac{5x}{5} = \frac{50}{5}$ $\frac{5x}{5} = \frac{35}{5}$ x = 7x = 10(14)(20)9x = 3610x = 80 $\frac{10x}{10} = \frac{80}{10}$ $\frac{9x}{9} = \frac{36}{9}$ x = 4x = 8(21)(15)8x = 8010x = 70 $\frac{10x}{10} = \frac{70}{10}$ $\frac{8x}{8} = \frac{80}{8}$ x = 7x = 10(16)(22)3x = 124x = 36 $\frac{3x}{3} = \frac{12}{3}$ $\frac{4x}{4} = \frac{36}{4}$ x = 4x = 9

(17) 9x = 72 $\frac{9x}{9} = \frac{72}{9}$ x = 8 10x = 20 $\frac{10x}{10} = \frac{20}{10}$ x = 2

(18) 2x = 16 $\frac{2x}{2} = \frac{16}{2}$ x = 8 5x = 35 $\frac{5x}{5} = \frac{35}{5}$ x = 7

Inverse operations: Answers

Date: _____

(1)

$$\frac{x}{5} = 3$$
$$\frac{x}{5} \times 5 = 3 \times 5$$
$$x = 15$$

(7)

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

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

$$x = 45$$

(2)

$$\frac{x}{2} = 9$$

$$\frac{x}{2} \times 2 = 9 \times 2$$

$$x = 18$$

(8)

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

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

$$x = 6$$

(3)

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

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

$$x = 15$$

(9)

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

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

$$x = 36$$

(4)

$$\frac{x}{9} = 7$$

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

$$x = 63$$

(10)

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

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

$$x = 80$$

(5)

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

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

$$x = 80$$

(11)

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

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

$$x = 25$$

(6)

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

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

$$x = 4$$

(12)

$$\frac{x}{5} = 3$$
$$\frac{x}{5} \times 5 = 3 \times 5$$
$$x = 15$$

$$\frac{x}{2} = 9$$

$$\frac{x}{2} \times 2 = 9 \times 2$$

$$x = 18$$

 $\frac{x}{3} = 7$ $\frac{x}{3} \times 3 = 7 \times 3$ x = 21

(14) (20)

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

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

$$x = 12$$

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

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

$$x = 32$$

(15) (21)

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

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

$$x = 54$$

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

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

$$x = 42$$

(16) (22)

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

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

$$x = 45$$

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

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

$$x = 24$$

(17) (23)

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

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

$$x = 70$$

$$\frac{x}{5} = 10$$
$$\frac{x}{5} \times 5 = 10 \times 5$$
$$x = 50$$

(18) (24)

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

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

$$x = 12$$

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

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

$$x = 28$$

Inverse operations: Answers

Date: _____

(1)

$$4x = 40$$
$$\frac{4x}{4} = \frac{40}{4}$$
$$x = 10$$

(7)

$$10x = 50$$
$$\frac{10x}{10} = \frac{50}{10}$$
$$x = 5$$

(2)

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

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

$$x = 36$$

(8)

$$\frac{x}{5} = 8$$
$$\frac{x}{5} \times 5 = 8 \times 5$$
$$x = 40$$

(3)

$$x+1=6$$
$$x+1-1=6-1$$
$$x=5$$

(9)

$$x-4=7$$

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

$$x=11$$

(4)

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

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

$$x = 24$$

(10)

$$4x = 28$$
$$\frac{4x}{4} = \frac{28}{4}$$
$$x = 7$$

(5)

$$10x = 30$$
$$\frac{10x}{10} = \frac{30}{10}$$
$$x = 3$$

(11)

$$6x = 36$$

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

$$x = 6$$

(6)

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

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

$$x = 15$$

(12)

$$x-5=7$$

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

$$x=12$$

x - 9 = 6 2x = 18 x - 9 + 9 = 6 + 9 $\frac{2x}{2} = \frac{18}{2}$ x = 15 x = 9

(14) $\frac{x}{10} = 7$ $\frac{x}{10} \times 10 = 7 \times 10$ x = 70 x = 70 (20) 4x = 28 $\frac{4x}{4} = \frac{28}{4}$

(15) 6x = 60 $\frac{6x}{6} = \frac{60}{6}$ x = 10 x - 2 = 9x - 2 + 2 = 9 + 2x = 11

(16) 8x = 64 x - 10 = 10 $\frac{8x}{9} = \frac{64}{9}$ x - 10 + 10 = 10 + 10

 $\frac{8x}{8} = \frac{64}{8}$ x = 8 x = 10 + 10 = 10 + 10 x = 20

(17) 9x = 18 $\frac{9x}{9} = \frac{18}{9}$ x = 2 (23) $\frac{x}{9} = 10$ $\frac{x}{9} \times 9 = 10 \times 9$ x = 90

(18) 8x = 24 $\frac{8x}{8} = \frac{24}{8}$ x = 3 $\frac{x}{2} = 3$ $\frac{x}{2} \times 2 = 3 \times 2$ x = 6

(24)