Name: _____ **Date:** _____

Inverse operations: Questions

(1)
$$4(x+9) = 68$$
$$\frac{4(x+9)}{\dots} = \frac{68}{\dots}$$
$$x+9 = \dots$$
$$x+9-\dots = \dots - \dots$$
$$x = \dots$$

(2)
$$\frac{x}{3}+6 = 10$$
$$\frac{x}{3}+6-\dots = 10-\dots$$
$$\frac{x}{3} = \dots$$
$$\frac{x}{3}\times\dots = \dots\times\dots$$
$$x = \dots$$

(3)
$$\frac{x+5}{10} = 8$$
$$\frac{x+5}{10}\times\dots = 8\times\dots$$
$$x+5 = \dots$$
$$x+5-\dots = \dots - \dots$$
$$x = \dots$$

(4)
$$\frac{x+7}{6} = 9$$
$$\frac{x+7}{6}\times\dots = 9\times\dots$$
$$x+7 = \dots$$
$$x+7-\dots = \dots - \dots$$
$$x = \dots$$

(5)
$$4x-7 = 33$$
$$4x-7+\dots = 33+\dots$$
$$4x = \dots$$
$$\frac{4x}{\dots} = \frac{\dots}{\dots}$$
$$x = \dots$$

(6)
$$\frac{x+1}{7} = 5$$
$$\frac{x+1}{7}\times\dots = 5\times\dots$$
$$x+1 = \dots$$
$$x+1-\dots = \dots - \dots$$
$$x = \dots$$

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

(8)
$$\frac{x}{5}-2 = 7$$
$$\frac{x}{5}-2+\dots = 7+\dots$$
$$\frac{x}{5} = \dots$$
$$\frac{x}{5}\times\dots = \dots\times\dots$$
$$x = \dots$$

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

(10)
$$\frac{x-2}{8} = 8$$
$$\frac{x-2}{8}\times\dots = 8\times\dots$$
$$x-2 = \dots$$
$$x-2+\dots = \dots + \dots$$
$$x = \dots$$

(11)
$$\frac{x}{7}+5=11$$
$$\frac{x}{7}+5-\ldots=11-\ldots$$
$$\frac{x}{7}=\ldots$$
$$\frac{x}{7}\times\ldots=\ldots\times\ldots$$
$$x=\ldots$$

(12)
$$10(x-6)=30$$
$$\frac{10(x-6)}{\ldots}=\frac{30}{\ldots}$$
$$x-6=\ldots$$
$$x-6+\ldots=\ldots+\ldots$$
$$x=\ldots$$

(13)
$$5x+6=26$$
$$5x+6-\ldots=26-\ldots$$
$$5x=\ldots$$
$$\frac{5x}{\ldots}=\frac{\ldots}{\ldots}$$
$$x=\ldots$$

(14)
$$3(x-2)=3$$
$$\frac{3(x-2)}{\ldots}=\frac{3}{\ldots}$$
$$x-2=\ldots$$
$$x-2+\ldots=\ldots+\ldots$$
$$x=\ldots$$

(15)
$$\frac{x}{8}+4=6$$
$$\frac{x}{8}+4-\ldots=6-\ldots$$
$$\frac{x}{8}=\ldots$$
$$\frac{x}{8}\times\ldots=\ldots\times\ldots$$
$$x=\ldots$$

(16)
$$\frac{x-1}{8}=2$$
$$\frac{x-1}{8}\times\ldots=2\times\ldots$$
$$x-1=\ldots$$
$$x-1+\ldots=\ldots+\ldots$$
$$x=\ldots$$

(17)
$$7x-3=25$$
$$7x-3+\ldots=25+\ldots$$
$$7x=\ldots$$
$$\frac{7x}{\ldots}=\frac{\ldots}{\ldots}$$
$$x=\ldots$$

(18)
$$\frac{x+1}{6}=10$$
$$\frac{x+1}{6}\times\ldots=10\times\ldots$$
$$x+1=\ldots$$
$$x+1-\ldots=\ldots-\ldots$$
$$x=\ldots$$

(19)
$$\frac{x}{9}-3=-1$$
$$\frac{x}{9}-3+\ldots=-1+\ldots$$
$$\frac{x}{9}=\ldots$$
$$\frac{x}{9}\times\ldots=\ldots\times\ldots$$
$$x=\ldots$$

(20)
$$7(x-5)=14$$
$$\frac{7(x-5)}{\ldots}=\frac{14}{\ldots}$$
$$x-5=\ldots$$
$$x-5+\ldots=\ldots+\ldots$$
$$x=\ldots$$

(21)

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

(22)

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

(23)

$$\frac{x+3}{2} = 9$$
$$\frac{x+3}{2} \times \ldots = 9 \times \ldots$$
$$x + 3 = \ldots$$
$$x + 3 - \ldots = \ldots - \ldots$$
$$x = \ldots$$

(24)

$$10x + 6 = 16$$
$$10x + 6 - \ldots = 16 - \ldots$$
$$10x = \ldots$$
$$\frac{10x}{\ldots} = \frac{\ldots}{\ldots}$$
$$x = \ldots$$

(25)

$$\frac{x}{10} + 10 = 15$$
$$\frac{x}{10} + 10 - \ldots = 15 - \ldots$$
$$\frac{x}{10} = \ldots$$
$$\frac{x}{10} \times \ldots = \ldots \times \ldots$$
$$x = \ldots$$

(26)

$$\frac{x}{9} + 3 = 7$$
$$\frac{x}{9} + 3 - \ldots = 7 - \ldots$$
$$\frac{x}{9} = \ldots$$
$$\frac{x}{9} \times \ldots = \ldots \times \ldots$$
$$x = \ldots$$

(27)

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

(28)

$$2x - 6 = 12$$
$$2x - 6 + \ldots = 12 + \ldots$$
$$2x = \ldots$$
$$\frac{2x}{\ldots} = \frac{\ldots}{\ldots}$$
$$x = \ldots$$

(29)

$$\frac{x-2}{5} = 4$$
$$\frac{x-2}{5} \times \ldots = 4 \times \ldots$$
$$x - 2 = \ldots$$
$$x - 2 + \ldots = \ldots + \ldots$$
$$x = \ldots$$

(30)

$$\frac{x-8}{2} = 7$$
$$\frac{x-8}{2} \times \ldots = 7 \times \ldots$$
$$x - 8 = \ldots$$
$$x - 8 + \ldots = \ldots + \ldots$$
$$x = \ldots$$

(31)

$$5(x-5) = -10$$
$$\frac{5(x-5)}{\dots} = \frac{-10}{\dots}$$
$$x - 5 = \dots$$
$$x - 5 + \dots = \dots + \dots$$
$$x = \dots$$

(32)

$$\frac{x-4}{5} = 4$$
$$\frac{x-4}{5} \times \dots = 4 \times \dots$$
$$x - 4 = \dots$$
$$x - 4 + \dots = \dots + \dots$$
$$x = \dots$$

(33)

$$\frac{x}{6} + 10 = 15$$
$$\frac{x}{6} + 10 - \dots = 15 - \dots$$
$$\frac{x}{6} = \dots$$
$$\frac{x}{6} \times \dots = \dots \times \dots$$
$$x = \dots$$

(34)

$$\frac{x}{2} - 6 = -2$$
$$\frac{x}{2} - 6 + \dots = -2 + \dots$$
$$\frac{x}{2} = \dots$$
$$\frac{x}{2} \times \dots = \dots \times \dots$$
$$x = \dots$$

(35)

$$\frac{x}{5} - 4 = -1$$
$$\frac{x}{5} - 4 + \dots = -1 + \dots$$
$$\frac{x}{5} = \dots$$
$$\frac{x}{5} \times \dots = \dots \times \dots$$
$$x = \dots$$

(36)

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

(37)

$$\frac{x+5}{7} = 10$$
$$\frac{x+5}{7} \times \dots = 10 \times \dots$$
$$x + 5 = \dots$$
$$x + 5 - \dots = \dots - \dots$$
$$x = \dots$$

(38)

$$\frac{x}{7} + 1 = 3$$
$$\frac{x}{7} + 1 - \dots = 3 - \dots$$
$$\frac{x}{7} = \dots$$
$$\frac{x}{7} \times \dots = \dots \times \dots$$
$$x = \dots$$

(39)

$$7(x+9) = 119$$
$$\frac{7(x+9)}{\dots} = \frac{119}{\dots}$$
$$x + 9 = \dots$$
$$x + 9 - \dots = \dots - \dots$$
$$x = \dots$$

(40)

$$\frac{x+6}{3} = 10$$
$$\frac{x+6}{3} \times \dots = 10 \times \dots$$
$$x + 6 = \dots$$
$$x + 6 - \dots = \dots - \dots$$
$$x = \dots$$

(41)
$$9x - 4 = 77$$
$$9x - 4 + \ldots = 77 + \ldots$$
$$9x = \ldots$$
$$\frac{9x}{\ldots} = \frac{\ldots}{\ldots}$$
$$x = \ldots$$

(42)
$$4(x + 5) = 24$$
$$\frac{4(x+5)}{\ldots} = \frac{24}{\ldots}$$
$$x + 5 = \ldots$$
$$x + 5 - \ldots = \ldots - \ldots$$
$$x = \ldots$$

(43)
$$\frac{x}{9} - 3 = 6$$
$$\frac{x}{9} - 3 + \ldots = 6 + \ldots$$
$$\frac{x}{9} = \ldots$$
$$\frac{x}{9} \times \ldots = \ldots \times \ldots$$
$$x = \ldots$$

(44)
$$\frac{x}{9} - 4 = 6$$
$$\frac{x}{9} - 4 + \ldots = 6 + \ldots$$
$$\frac{x}{9} = \ldots$$
$$\frac{x}{9} \times \ldots = \ldots \times \ldots$$
$$x = \ldots$$

(45)
$$\frac{x+3}{2} = 3$$
$$\frac{x+3}{2} \times \ldots = 3 \times \ldots$$
$$x + 3 = \ldots$$
$$x + 3 - \ldots = \ldots - \ldots$$
$$x = \ldots$$

(46)
$$7x - 8 = -1$$
$$7x - 8 + \ldots = -1 + \ldots$$
$$7x = \ldots$$
$$\frac{7x}{\ldots} = \frac{\ldots}{\ldots}$$
$$x = \ldots$$

(47)
$$2x - 2 = 4$$
$$2x - 2 + \ldots = 4 + \ldots$$
$$2x = \ldots$$
$$\frac{2x}{\ldots} = \frac{\ldots}{\ldots}$$
$$x = \ldots$$

(48)
$$\frac{x+1}{10} = 1$$
$$\frac{x+1}{10} \times \ldots = 1 \times \ldots$$
$$x + 1 = \ldots$$
$$x + 1 - \ldots = \ldots - \ldots$$
$$x = \ldots$$

(49)
$$2(x + 4) = 26$$
$$\frac{2(x+4)}{\ldots} = \frac{26}{\ldots}$$
$$x + 4 = \ldots$$
$$x + 4 - \ldots = \ldots - \ldots$$
$$x = \ldots$$

(50)
$$\frac{x}{5} + 9 = 18$$
$$\frac{x}{5} + 9 - \ldots = 18 - \ldots$$
$$\frac{x}{5} = \ldots$$
$$\frac{x}{5} \times \ldots = \ldots \times \ldots$$
$$x = \ldots$$

(51)

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

(52)

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

(53)

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

(54)

$$\frac{x+2}{9} = 7$$
$$\frac{x+2}{9} \times \ldots = 7 \times \ldots$$
$$x+2 = \ldots$$
$$x+2-\ldots = \ldots - \ldots$$
$$x = \ldots$$

(55)

$$\frac{x}{2}+10 = 13$$
$$\frac{x}{2}+10-\ldots = 13-\ldots$$
$$\frac{x}{2} = \ldots$$
$$\frac{x}{2} \times \ldots = \ldots \times \ldots$$
$$x = \ldots$$

(56)

$$2x+9 = 23$$
$$2x+9-\ldots = 23-\ldots$$
$$2x = \ldots$$
$$\frac{2x}{\ldots} = \frac{\ldots}{\ldots}$$
$$x = \ldots$$

(57)

$$\frac{x}{7}+7 = 9$$
$$\frac{x}{7}+7-\ldots = 9-\ldots$$
$$\frac{x}{7} = \ldots$$
$$\frac{x}{7} \times \ldots = \ldots \times \ldots$$
$$x = \ldots$$

(58)

$$8x+6 = 38$$
$$8x+6-\ldots = 38-\ldots$$
$$8x = \ldots$$
$$\frac{8x}{\ldots} = \frac{\ldots}{\ldots}$$
$$x = \ldots$$

(59)

$$\frac{x}{7}-10 = -1$$
$$\frac{x}{7}-10+\ldots = -1+\ldots$$
$$\frac{x}{7} = \ldots$$
$$\frac{x}{7} \times \ldots = \ldots \times \ldots$$
$$x = \ldots$$

(60)

$$\frac{x}{9}-5 = 0$$
$$\frac{x}{9}-5+\ldots = 0+\ldots$$
$$\frac{x}{9} = \ldots$$
$$\frac{x}{9} \times \ldots = \ldots \times \ldots$$
$$x = \ldots$$

(61)
$$10(x-8)=10$$
$$\frac{10(x-8)}{\dots}=\frac{10}{\dots}$$
$$x-8=\dots$$
$$x-8+\dots=\dots+\dots$$
$$x=\dots$$

(62)
$$4(x+7)=48$$
$$\frac{4(x+7)}{\dots}=\frac{48}{\dots}$$
$$x+7=\dots$$
$$x+7-\dots=\dots-\dots$$
$$x=\dots$$

(63)
$$7(x-3)=21$$
$$\frac{7(x-3)}{\dots}=\frac{21}{\dots}$$
$$x-3=\dots$$
$$x-3+\dots=\dots+\dots$$
$$x=\dots$$

(64)
$$\frac{x}{3}-3=7$$
$$\frac{x}{3}-3+\dots=7+\dots$$
$$\frac{x}{3}=\dots$$
$$\frac{x}{3}\times\dots=\dots\times\dots$$
$$x=\dots$$

(65)
$$8x+3=19$$
$$8x+3-\dots=19-\dots$$
$$8x=\dots$$
$$\frac{8x}{\dots}=\frac{\dots}{\dots}$$
$$x=\dots$$

(66)
$$\frac{x}{5}-8=-4$$
$$\frac{x}{5}-8+\dots=-4+\dots$$
$$\frac{x}{5}=\dots$$
$$\frac{x}{5}\times\dots=\dots\times\dots$$
$$x=\dots$$

(67)
$$2(x-10)=-4$$
$$\frac{2(x-10)}{\dots}=\frac{-4}{\dots}$$
$$x-10=\dots$$
$$x-10+\dots=\dots+\dots$$
$$x=\dots$$

(68)
$$6x-9=51$$
$$6x-9+\dots=51+\dots$$
$$6x=\dots$$
$$\frac{6x}{\dots}=\frac{\dots}{\dots}$$
$$x=\dots$$

(69)
$$9x-6=75$$
$$9x-6+\dots=75+\dots$$
$$9x=\dots$$
$$\frac{9x}{\dots}=\frac{\dots}{\dots}$$
$$x=\dots$$

(70)
$$\frac{x}{9}-3=7$$
$$\frac{x}{9}-3+\dots=7+\dots$$
$$\frac{x}{9}=\dots$$
$$\frac{x}{9}\times\dots=\dots\times\dots$$
$$x=\dots$$

(71)
$$\frac{x+3}{8} = 9$$
$$\frac{x+3}{8} \times \ldots = 9 \times \ldots$$
$$x+3 = \ldots$$
$$x+3-\ldots = \ldots - \ldots$$
$$x = \ldots$$

(72)
$$\frac{x}{7} + 3 = 13$$
$$\frac{x}{7} + 3 - \ldots = 13 - \ldots$$
$$\frac{x}{7} = \ldots$$
$$\frac{x}{7} \times \ldots = \ldots \times \ldots$$
$$x = \ldots$$

(73)
$$\frac{x}{5} - 2 = 3$$
$$\frac{x}{5} - 2 + \ldots = 3 + \ldots$$
$$\frac{x}{5} = \ldots$$
$$\frac{x}{5} \times \ldots = \ldots \times \ldots$$
$$x = \ldots$$

(74)
$$7x + 7 = 42$$
$$7x + 7 - \ldots = 42 - \ldots$$
$$7x = \ldots$$
$$\frac{7x}{\ldots} = \frac{\ldots}{\ldots}$$
$$x = \ldots$$

(75)
$$\frac{x+10}{6} = 4$$
$$\frac{x+10}{6} \times \ldots = 4 \times \ldots$$
$$x+10 = \ldots$$
$$x+10-\ldots = \ldots - \ldots$$
$$x = \ldots$$

(76)
$$\frac{x}{5} - 3 = 2$$
$$\frac{x}{5} - 3 + \ldots = 2 + \ldots$$
$$\frac{x}{5} = \ldots$$
$$\frac{x}{5} \times \ldots = \ldots \times \ldots$$
$$x = \ldots$$

(77)
$$\frac{x+5}{8} = 4$$
$$\frac{x+5}{8} \times \ldots = 4 \times \ldots$$
$$x+5 = \ldots$$
$$x+5-\ldots = \ldots - \ldots$$
$$x = \ldots$$

(78)
$$6x - 8 = 34$$
$$6x - 8 + \ldots = 34 + \ldots$$
$$6x = \ldots$$
$$\frac{6x}{\ldots} = \frac{\ldots}{\ldots}$$
$$x = \ldots$$

(79)
$$\frac{x-9}{9} = 5$$
$$\frac{x-9}{9} \times \ldots = 5 \times \ldots$$
$$x-9 = \ldots$$
$$x-9+\ldots = \ldots + \ldots$$
$$x = \ldots$$

(80)
$$\frac{x+10}{8} = 4$$
$$\frac{x+10}{8} \times \ldots = 4 \times \ldots$$
$$x+10 = \ldots$$
$$x+10-\ldots = \ldots - \ldots$$
$$x = \ldots$$