

For these problems, you must write the proper diagram to show how the equation is made and then solved. Answer properly.

1. $\frac{n-7}{4} = 19$

$n-7 \xrightarrow{\div 4} \frac{n-7}{4}$
 $83 \xleftarrow{+7} 76 \xleftarrow{\times 4} 19$
 $n = 83$

2. $\frac{n}{14} + 25 = 32$

$n \xrightarrow{\div 14} \frac{n}{14} \xrightarrow{+25} \frac{n}{14} + 25$
 $98 \xleftarrow{\times 14} 7 \xleftarrow{-25} 32$
 $n = 98$

3. $6n - 75 = 21$

$n \xrightarrow{\times 6} 6n \xrightarrow{-75} 6n - 75$
 $16 \xleftarrow{-6} 96 \xleftarrow{+75} 21$
 $n = 16$

4. $2(n+17) = 52$

$n \xrightarrow{+17} n+17 \xrightarrow{\times 2} 2(n+17)$
 $9 \xleftarrow{-17} 26 \xleftarrow{\div 2} 52$
 $n = 9$

5. $7(n-13) = 133$

$n \xrightarrow{-13} n-13 \xrightarrow{\times 7} 7(n-13)$
 $32 \xleftarrow{+13} 19 \xleftarrow{\div 7} 133$
 $n = 32$

6. $\frac{n+54}{5} = 16$

$n \xrightarrow{+54} n+54 \xrightarrow{\div 5} \frac{n+54}{5}$
 $26 \xleftarrow{-54} 80 \xleftarrow{\div 5} 16$
 $n = 26$

7. $\frac{n}{2} - 16 = 11$

$n \xrightarrow{\div 2} \frac{n}{2} \xrightarrow{-16} \frac{n}{2} - 16$
 $54 \xleftarrow{\times 2} 27 \xleftarrow{+16} 11$
 $n = 54$

8. $18n + 3 = 147$

$n \xrightarrow{\times 18} 18n \xrightarrow{+3} 18n + 3$
 $8 \xleftarrow{\div 18} 144 \xleftarrow{-3} 147$
 $n = 8$

You have time to check

For these problems, it is your choice of how to solve.
Write your answers clearly and properly.

$$1. \frac{n}{3} - 20 = 39$$

$n = 177$ ✓

$$n \div 3 \rightarrow \frac{n}{3} \xrightarrow{-20} \frac{n}{3} - 20$$

$$177 \xrightarrow{\div 3} 59 \xrightarrow{+20} 39$$

$$2. 5n - 62 = 78$$

$n = 28$ ✓

$$n \times 5 \rightarrow 5n \xrightarrow{-62} 5n - 62$$

$$28 \times 5 \rightarrow 140 \xrightarrow{-62} 78$$

$$3. \frac{n}{19} + 41 = 44$$

$n = 57$ ✓

$$n \div 19 \rightarrow \frac{n}{19} \xrightarrow{+41} \frac{n}{19} + 41$$

$$57 \div 19 \rightarrow 3 \xrightarrow{+41} 44$$

$$4. 18(n - 35) = 108$$

$n = 41$ ✓

$$n \xrightarrow{-35} n - 35 \xrightarrow{\times 18} 18(n - 35)$$

$$41 \xrightarrow{-35} 6 \xrightarrow{\times 18} 108$$

$$5. 16n + 5 = 101$$

$n = 6$ ✓

$$n \times 16 \rightarrow 16n \xrightarrow{+5} 16n + 5$$

$$6 \times 16 \rightarrow 96 \xrightarrow{+5} 101$$

$$6. \frac{n - 29}{5} = 17$$

$n = 114$ ✓

$$n \xrightarrow{-29} n - 29 \xrightarrow{\div 5} \frac{n - 29}{5}$$

$$114 \xrightarrow{-29} 85 \xrightarrow{\div 5} 17$$

$$7. 9(n + 8) = 207$$

15 ← not written properly

$$n \xrightarrow{+8} n + 8 \xrightarrow{\times 9} 9(n + 8)$$

$$15 \xrightarrow{+8} 23 \xrightarrow{\times 9} 207$$

$$8. \frac{n + 46}{27} = 4$$

$n = 62$ ✓

$$n \xrightarrow{+46} n + 46 \xrightarrow{\div 27} \frac{n + 46}{27}$$

$$62 \xrightarrow{+46} 108 \xrightarrow{\div 27} 4$$

You have time to check