

# SUBSTITUTION

NAME:

## ADDITION AND SUBTRACTION

HELPFUL EXAMPLES. FIND THE VALUE OF EACH EXPRESSION IF  $c = 5$  AND  $k = 2$ .

A.  $c + 10$   
 $5 + 10$   
 $15$

SUBSTITUTE:  
CHANGE THE "c"  
TO 5. THEN ADD.

B.  $12 - k$   
 $12 - 2$   
 $10$

SUBSTITUTE:  
CHANGE THE "k" TO  
2. THEN SUBTRACT.

C.  $c - k$   
 $5 - 2$   
 $3$

SUBSTITUTE:  
CHANGE THE "c" AND  
THE "k". THEN SOLVE.

FIND THE VALUE OF EACH EXPRESSION IF  $m = 7$ .

1.  $m + 4$

2.  $13 + m$

3.  $m + 8$

4.  $25 + m$

5.  $m - 2$

6.  $16 - m$

7.  $m - 7$

8.  $19 - m$

FIND THE VALUE OF EACH EXPRESSION IF  $x = 2$  AND  $y = 9$ .

9.  $x + 5 + y$

10.  $10 + x + y$

11.  $y + x + 17$

12.  $2 + x + y$

13.  $y - 3 - x$

14.  $21 - x - y$

15.  $y - x - 5$

16.  $18 - y - x$

FIND THE VALUE OF EACH EXPRESSION IF  $g = 11$  AND  $t = 15$ .

17.  $g - 10 + t$

18.  $8 + g - t$

19.  $t - 13 + g$

20.  $t + g - 11$

21.  $19 + t - g$

22.  $17 - t + g$

23.  $g + t - 25$

24.  $g - 6 + t$

FIND THE VALUE OF EACH EXPRESSION IF  $a = 3$ ,  $b = 18$ ,  $c = 5$ .

25.  $a + b + c$

26.  $c + 8 - a + b$

27.  $20 - b + c - a$

28.  $b - c + a$

29.  $b + 4 - c + a$

30.  $13 + c - b + a$

31.  $b - c - a + 9$

32.  $b + a - c$

# SUBSTITUTION

NAME:

## MULTIPLICATION AND DIVISION

HELPFUL EXAMPLES. FIND THE VALUE OF EACH EXPRESSION IF  $s = 5$  AND  $r = 2$ .

A.  $3rs = 3 \times 2 \times 5 = 3 \cdot 2 \cdot 5 = 30$

3rs IS THE SAME AS  
3 x r x s OR 3 x 2 x 5.

B.  $\frac{24}{r} = \frac{24}{2} = 24 \div 2 = 12$

$\frac{24}{r}$  THIS MEANS 24 DIVIDED  
BY r OR 24 DIVIDED BY 2.

FIND THE VALUE OF EACH EXPRESSION IF  $k = 8$ .

1.  $3 \times k = 3 \cdot k$

2.  $k \div 2$

3.  $32 \div k$

4.  $k \cdot 5$

5.  $4 \times k = 4k$

6.  $k \div 4 = \frac{k}{4}$

7.  $48 \div k = \frac{48}{k}$

8.  $k \cdot 2 = 2k$

FIND THE VALUE OF EACH EXPRESSION IF  $d = 2$  AND  $n = 10$

9.  $n \div d \div 5$

10.  $2 \cdot d \cdot n = 2dn$

11.  $5dn$

12.  $20 \div d \div n$

13.  $\frac{n}{5} \cdot d$

14.  $40 \div n \div d$

15.  $6 \cdot \frac{n}{d}$

16.  $4d \cdot 7$

FIND THE VALUE OF EACH EXPRESSION IF  $t = 3$  AND  $v = 21$

9.  $v \div t \cdot 2$

10.  $2tv$

11.  $5t \cdot 4$

12.  $7 \cdot t \div v$

13.  $\frac{2v}{6} = 2v \div 6$

14.  $\frac{8t}{4}$

15.  $t^2 = t \cdot t$

16.  $6 \cdot \frac{v}{t}$

FIND THE VALUE OF EACH EXPRESSION IF  $f = 2$ ,  $h = 12$ ,  $w = 4$ .

25.  $fhw$

26.  $\frac{fh}{w}$

27.  $\frac{h}{f} \cdot \frac{w}{f}$

28.  $\frac{2h}{fw}$

29.  $w^3 = w \cdot w \cdot w$

30.  $3h \div 2f$

31.  $5f \cdot 4w$

32.  $\frac{2fhw}{fhw}$