

Evaluate the following expressions for the given value(s).

1.  $3x+5$  for  $x=-2$

$$3(-2) + 5$$

$$-6 + 5$$

$$= -1$$

3.  $7m-6n+3$  for  $m=2, n=-4$

$$7(2) - 6(-4) + 3$$

$$14 - 6(-4) + 3$$

$$14 + 24 + 3$$

$$38 + 3$$

$$41$$

5.  $5(c+2)$  for  $c=7$

$$5(7+2)$$

$$5(9)$$

$$=45$$

2.  $\frac{d}{5}-d$  for  $d=10$

$$\frac{10}{5} - 10$$

$$2 - 10 = -8$$

4.  $rst$  for  $r=-1, s=-2, t=5$

$$(-1)(-2)(5)$$

$$(2)(5)$$

$$10$$

6.  $w^2+y^2$  for  $w=-3, y=6$

$$(-3)^2 + (6)^2$$

$$9 + 36$$

$$=45$$

**Classroom Expressions:**

Variable	Meaning	Numerical Value
B	The number of <b>B</b> oys in the classroom	21
G	The number of <b>G</b> irls in the classroom	18
P	The number of <b>P</b> encils each student has	3
L	The cost of a <b>L</b> unch for each student (in dollars)	6
S	The cost of a <b>S</b> nack for each student (in dollars)	2
M	The amount of time a student spends in <b>M</b> ath class each day (in minutes)	80
H	The amount of time a student spends on math <b>H</b> omework each day (in minutes)	30

Find the numerical value of the following expressions. Be sure to include the proper units.

10.  $B+G$

$$21 + 18 = 39 \text{ students}$$

11.  $GP$

$$18(3) = 54$$

Pencils the girls have

12.  $BM+BH$

$$21(80) + 21(30)$$

$$1680 + 630$$

$$= 2310 \text{ min. Boys Kate on math.}$$

13.  $L+S$

$$6 + 2 = 8 \text{ dollars for Food}$$

14.  $G(L+S)$

$$18(8)$$

$$= 144$$

Money on paid by girls

15.  $P(B+G)$

$$3(39) = 117 \text{ pencils in class}$$

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**Write an Expression and then Evaluate the expression for the given value.**

16. The total number of pencils for all the boys in the class.

Expression:

$$B \cdot P = 21 \cdot 3$$

17. The cost of lunch for all the students in the class

Expression:

$$(B+G)L = (21+18)6$$
$$BL + GL = (21 \cdot 6) + (18 \cdot 6)$$

18. The total amount of time that all the students in the class spend on Math each day (both in class and on homework)

Expression:

$$B(M+H) + G(M+H)$$
$$(B+G)(M+H)$$