

Name: _____

EXPRESSIONS WORKSHEET

Variables

- 1) Name a variable for: a) the age of your school; b) the weight of the food you eat in one day;
c) the time you sleep each day; d) the speed of a car
- a) _____ b) _____ c) _____ d) _____

Expressions

- 2) Rewrite the following in an algebraic format:

a) $5a \div b$ b) $3 \times c \times d$ c) $(4x + 3) \div 7b$ d) $7 \times c + 8 \div d$

e) $(8x + 3) \div a$ f) $(4f - 3) \div (3 \times n)$ g) $5 \times 3g - 7 \div (4n + 2)$

- 3) An expression that uses a variable is called a(n) _____ expression.

- 4) Write expressions for the following word phrases:

a) thirty-five decreased by a number, n

b) five times a weight, w

c) the quotient of 15 and a number, x

d) a number decreased by 5

Name: _____

5) With $n = \boxed{n}$, and $1 = \boxed{}$, draw the following expressions:

a) $3n + 2$

b) $2(n + 4)$

c) $3(2n + 2)$

d) $3(4n) + 2n$

6) Using the Order-of-Operations evaluate the following expressions:

a) $5 + 6 \div 7 \times 8$

a) _____

b) $3 \div 3 + 4 \div 4$

b) _____

c) $2(11 + 2c)$, with $c = 3$

c) _____

d) $(3n)(4k)$, with $n = 2$, $k = 5$

d) _____

e) $3w + 4w - w$, with $w = 3$

e) _____

f) $\frac{(3n + 1)}{2(2 - n)}$, with $n = 1$

f) _____

Patterns

7) In words describe the patterns below:

a) 3, 5, 8, 12, 17, 23, ...

b) $7m, 14m, 21m, 28m, \dots$

c) $9c + 1, 7c + 1, 5c + 1, \dots$