

## HW04: Variables and Expressions

- 1) Review your notes. Make sure you have summaries for Radicals, 1.1 Variables, and 1.2 Expressions.

**Define the following.**

- 2) Variable
- 3) Coefficient
- 4) Term
- 5) Expression
- 6) What letters cannot be used as a variable?
- 7) Write an expression that describes the cost (before tax) of an order of several fries (\$1.99) and some cheeseburgers (\$3.99). Be sure to define your variables.
- 8) Use your expression from the previous question to find the cost (before tax) of an order of 3 fries and 2 cheeseburgers.

**Evaluate each using the values given.**

- 9)  $y + 6 + x - y$ ; use  $x = 3$ , and  $y = 6$
- 10)  $y + x(y - 15)$ ; use  $x = -5$ , and  $y = 10$
- 11)  $(-6) + m + m - q$ ; use  $m = -6$ , and  $q = -2$
- 12)  $q(p - (m + q))$ ; use  $m = 7$ ,  $p = 10$ , and  $q = 9$
- 13)  $(-6) + (x - z)^2$ ; use  $x = 13$ , and  $z = 14$
- 14)  $c + a \div 3 + 6$ ; use  $a = -15$ , and  $c = 13$
- 15)  $(j - k)^3 - j$ ; use  $j = -9$ , and  $k = -13$
- 16)  $(-7)(q + p) + q$ ; use  $p = 15$ , and  $q = -7$
- 17)  $14 - x - ((-11) + z)$ ; use  $x = -2$ , and  $z = -12$
- 18)  $z - x + 10^2$ ; use  $x = -7$ , and  $z = 12$
- 19)  $z(y + y^2)$ ; use  $y = -11$ , and  $z = -1$
- 20)  $j + (h + 15)^2$ ; use  $h = -9$ , and  $j = -5$
- 21)  $(-3) + c - a^2$ ; use  $a = 8$ , and  $c = 4$
- 22)  $p^3 - (q - r)$ ; use  $p = 3$ ,  $q = -10$ , and  $r = 9$
- 23)  $(-14) + x \cdot y \div 6$ ; use  $x = -12$ , and  $y = -12$
- 24)  $j + 11^2 - k$ ; use  $j = 4$ , and  $k = 7$
- 25)  $xy \div (2z)$ ; use  $x = \sqrt{15}$ ,  $y = 5\sqrt{2}$ , and  $z = 3\sqrt{5}$