

## Vocabulary Practice Test – Intermediate Algebra

Math 80 Intermediate Algebra

Fill in the blanks using the words term, factor, sum, product, quotient, base, exponent, power, index, radicand and root.

1) Given  $m = \frac{y_2 - y_1}{x_2 - x_1}$   $y_2$  is a \_\_\_\_\_,  $y_2 - y_1$  is a \_\_\_\_\_ and  $\frac{y_2 - y_1}{x_2 - x_1}$  is a \_\_\_\_\_.

2) Given  $(f + g)(x) = \frac{4}{x} + \frac{3}{x+2}$  2 is a \_\_\_\_\_,  $x+2$  is a \_\_\_\_\_,  $\frac{4}{x}$  is both a \_\_\_\_\_ and a \_\_\_\_\_,  $\frac{3}{x+2}$  is both a \_\_\_\_\_ and a \_\_\_\_\_ and the entire right hand side is a \_\_\_\_\_.

3) Given  $\left(\frac{1}{5}x - 4y^3\right)^2$   $\frac{1}{5}x$  is both a \_\_\_\_\_ and a \_\_\_\_\_,  $y^3$  is both a \_\_\_\_\_ and a \_\_\_\_\_,  $\frac{1}{5}x - 4y^3$  is a \_\_\_\_\_,  $\left(\frac{1}{5}x - 4y^3\right)$  is a \_\_\_\_\_, 2 is an \_\_\_\_\_,  $\frac{1}{5}$  is a \_\_\_\_\_ and a \_\_\_\_\_ and the entire expression is a \_\_\_\_\_.

4) Given  $\frac{\frac{7x}{2x-2} + \frac{x}{x^2-1}}{\frac{4}{x+1} - \frac{2x^3}{3x+3}}$   $7x$  is a \_\_\_\_\_,  $x^2-1$  is a \_\_\_\_\_,  $\frac{x}{x^2-1}$  is both a \_\_\_\_\_ and a \_\_\_\_\_,  $2x^3$  is a \_\_\_\_\_,  $x^3$  is both a \_\_\_\_\_ and a \_\_\_\_\_, the 3 in  $x^3$  is an \_\_\_\_\_, the first 3 in  $3x+3$  is a \_\_\_\_\_, and the second 3 in  $3x+3$  is a \_\_\_\_\_,  $\frac{4}{x+1}$  is both a \_\_\_\_\_ and a \_\_\_\_\_,  $\frac{4}{x+1} - \frac{2x^3}{3x+3}$  is a \_\_\_\_\_,  $\frac{7x}{2x-2} + \frac{x}{x^2-1}$  is a \_\_\_\_\_, and the entire expression is a \_\_\_\_\_.

5) Given  $\frac{2\sqrt{x} + \sqrt{y}}{2\sqrt{x} - \sqrt{y}}$   $x$  is a \_\_\_\_\_,  $\sqrt{y}$  is both a \_\_\_\_\_ and a \_\_\_\_\_, 2 is a \_\_\_\_\_,  $2\sqrt{x}$  is both a \_\_\_\_\_ and a \_\_\_\_\_,  $2\sqrt{x} + \sqrt{y}$  is a \_\_\_\_\_,  $2\sqrt{x} - \sqrt{y}$  is a \_\_\_\_\_, and  $\frac{2\sqrt{x} + \sqrt{y}}{2\sqrt{x} - \sqrt{y}}$  is a \_\_\_\_\_.

6) Given  $7^{\frac{x-2}{6}} = \sqrt[6]{7}$   $x-2$  is a \_\_\_\_\_,  $\frac{x-2}{6}$  is both a \_\_\_\_\_ and an \_\_\_\_\_, the 7 on the left is a \_\_\_\_\_, while the 7 on the right is a \_\_\_\_\_,  $7^{\frac{x-2}{6}}$  is a \_\_\_\_\_ and  $\sqrt[6]{7}$  is a \_\_\_\_\_.