

Handout – Functions

Dusty Wilson

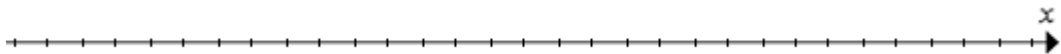
Math 115

Example 1: Find the domain of $f(x) = \sqrt{x+2}$.

a.) The domain of f will only include:

b.) Algebraically, this means:

c.) Create a sign diagram of the expression directly related to (b.).



d.) Use the sign diagram to find the domain f ?

Type of Notation	Your Answer:
i.) Graph on a number line	
ii.) Interval notation	
iii.) Inequality notation	
iv.) Set notation	

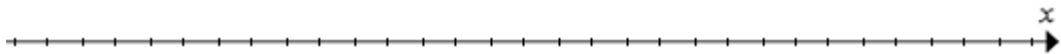
e.) Use and English sentence to express the domain in set notation.

Example 2: Find the domain of $g(x) = \sqrt{x^2 - 9}$.

a.) The domain of g will only include:

b.) Algebraically, this means:

c.) Create a sign diagram of the expression directly related to (b.).



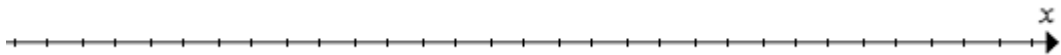
d.) Use the sign diagram to find the domain g ?

Type of Notation	Your Answer:
i.) Graph on a number line	
ii.) Interval notation	
iii.) Inequality notation	
iv.) Set notation	

e.) Use and English sentence to express the domain in set notation.

Example 3: Find the domain of $h(x) = \sqrt{3 + 2x - x^2}$.

a.) Create a sign diagram of the expression directly related to h .



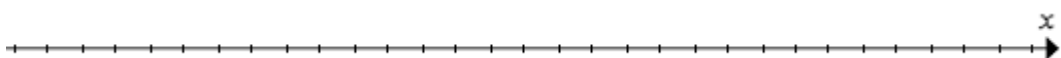
b.) Use the sign diagram to find the domain of h .

Type of Notation	Your Answer:
i.) Inequality notation	
ii.) Set notation	

c.) Use and English sentence to express the domain in set notation.

Example 4: Find the domain of $k(x) = \sqrt{\frac{3-x}{x+2}}$.

a.) Create a sign diagram of the expression directly related to k .



b.) Use the sign diagram to express the domain of k in set notation.
