

Hand In Assignment

Name: _____

Total: ____/20

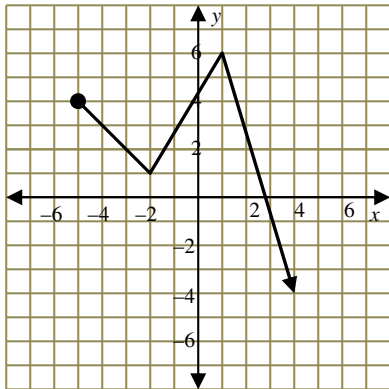
Due Date: _____

Please Show All Work on a Separate Sheet of Paper. Don't forget your units!

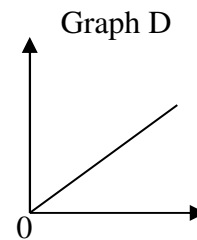
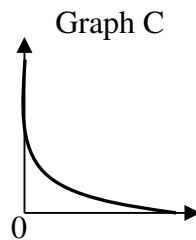
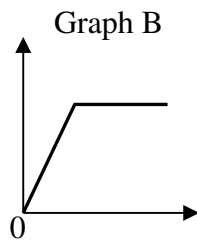
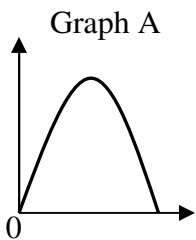
/1 1. Classify $-\sqrt{7}$ as rational or irrational. Justify your answer.

/1 2. Rewrite the mixed radical $2^3\sqrt{4}$ as an entire radical.

/2 3. For the following graph:
 • Determine the domain and range.
 • State whether it is function.



4. Match each graph with a situation from the list and explain your choice.



/4 a) The temperature of a cup of hot coffee over time.
 b) A truck accelerating to a constant speed.
 c) The distance a person walks during a hike.
 d) The height of a football ball kicked across a field.

5. Factor Completely:

- /4
- a) $x^2 + 5x + 6$
 - b) $3x^2 + 5x - 12$
 - c) $x^3y^2 - xy$

6. If $f(x) = 2x - 2$ and $g(x) = -2x^2 - 3$ find:

- /3
- a) $f(a)$
 - b) $g(-2)$
 - c) $f(1) + g(0)$

7. Simplify the following:

- /5
- a) $5x(x^2 + x - 2) - (9x + 3)$
 - b) $\sqrt[3]{48}$
 - c) $-16^{-\frac{3}{4}}$
 - d) 10.15^0