

YOUR NAME: \_\_\_\_\_

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Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. (a) Write in list notation and graph the set

$$\{x \text{ integer} : x \text{ is greater than } -7 \text{ and less than or equal to } 2\}.$$

- (b) Write in interval notation and graph the set  $\{x \text{ real} : 2018 \leq x < 2020\}$ .

2. (a) Write the answers in interval notation:

$$[-7, 3) \cup [1, 5) =$$

$$[-7, 3) \cap [1, 5) =$$

- (b) Evaluate the arithmetic expression:

$$5[7(-3) + |12 - 23|] =$$