$\qquad$
$\qquad$

1. Consider the language of binary strings defined by the following regular expression:

$$
(10)^{*} 01(10)^{*}(0 \mid 1)
$$

Which of these strings are accepted by this expression? (Circle all that apply, if any).

- 10011
- 0110101
- 01
- 1010010
- 10011001

2. Give a regular expression which accepts the language of all binary strings which end in 1 and whose length is a positive multiple of 3 .
3. Does the regular expression

$$
[+\mid-](0|1| \ldots \mid 9)^{*}[.](0|1| \ldots \mid 9)^{*}
$$

recognize the language of decimal numbers? Why or why not?

