

**Regular Expressions**

Do NOT write on this test. Record all answers on the bubble sheet. **Closed book. No notes.** Work strictly from memory. **No calculators. No time limit. Scratch paper okay.**

Matching: Which Perl regular expression commands have what meaning? (If no match mark J.)

- (A) \B (B) \S (C) \W (D) \b (E) \f (F) \i (G) \s (H) \t (I) \w
- 1/1p. tab  
 2/1p. word character  
 3/1p. non whitespace  
 4/1p. word boundary  
 5/1p. form feed  
 6/1p. non a word character

Matching: Which Perl regular expression commands have what meaning? (If no match mark J.)

- (A) +/- (B) ? (C) C-X (D) [ (E) \D (F) \d (G) \r (H) { (I) {n,}
- 7/1p. non-digit  
 8/1p. carriage return  
 9/1p. start of character class  
 10/1p. repeat zero or one times  
 11/1p. control X  
 12/1p. n or more times

True or False: does the regular expression match the string?

- 13/1p. Does the regular expression “d+d” match the string “d”?
- 14/1p. Does the regular expression “(hs)?|fx” match the string “fx”?
- 15/1p. Does the regular expression “(pq)\*|yx” match the string “pqqyx”?
- 16/1p. Does the regular expression “z+ga” match the string “zzga”?
- 17/1p. Does the regular expression “(pu)+(nf)?” match the string “pupunf”?
- 18/1p. Does the regular expression “((bg)?f)+” match the string “bgf”?
- 19/1p. Does the regular expression “kw+|(gd)?” match the string “kwgdgd”?
- 20/1p. Does the regular expression “((sb)+|d)\*” match the string “sbbsbb”?
- 21/1p. Does the regular expression “su\*sh|(hu)\*” match the empty string?
- 22/1p. Does the regular expression “(yu)+x\*|dx” match the string “yu”?
- 23/1p. Does the regular expression “hd+|r(hf)?” match the string “rhff”?
- 24/1p. Does the regular expression “(xb)?|gp+” match the string “xbg”?
- 25/1p. Does the regular expression “n?(wq)\*|t|k” match the string “nwt”?
- 26/1p. Does the regular expression “rr?zp|sr” match the string “rrrzp”?
- 27/1p. Does the regular expression “q?|cd?zy” match the string “cdzy”?
- 28/1p. Does the regular expression “(xn)?|(u?|tw)?” match the string “u”?
- 29/1p. Does the regular expression “((t+|pp)?(px)\*)?” match the string “tt”?
- 30/1p. Does the regular expression “((pu)\*xx\*pw)?” match the string “pw”?

Total points 30.

**Answer Key** (points per line)

1 (1).	H
2 (1).	I
3 (1).	B
4 (1).	D
5 (1).	E
6 (1).	C
7 (1).	E
8 (1).	G
9 (1).	D
10 (1).	B
11 (1).	J
12 (1).	I
13 (1).	false
14 (1).	true
15 (1).	false
16 (1).	true
17 (1).	true
18 (1).	true
19 (1).	false
20 (1).	false
21 (1).	true
22 (1).	true
23 (1).	false
24 (1).	false
25 (1).	false
26 (1).	false
27 (1).	true
28 (1).	true
29 (1).	true
30 (1).	false

Total points 30.