

**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) + (C) \C-X (D) \a (E) \cX (F) \e (G) \i (H) \t (I) esc

- 1/1p. octal dd
- 2/1p. control X
- 3/1p. the escape character
- 4/1p. alarm (alert)
- 5/1p. tab
- 6/1p. repeat one or more times

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

(A) \n (B) \nn (C) \r (D) \xnn (E) ^ (F) {,n,} (G) {n,m} (H) {n..m} (I) {n}

- 7/1p. non whitespace
- 8/1p. exactly n times
- 9/1p. newline
- 10/1p. hex character nn
- 11/1p. start of string
- 12/1p. at least n times, at most m

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

- 13/1p. Does the string “uh” match the regular expression “xz\*uh”?
- 14/1p. Does the string “aaa” match the regular expression “(aa)+|w”?
- 15/1p. Does the string “dggrg” match the regular expression “dg+rg”?
- 16/1p. Does the string “pssf” match the regular expression “(ps)\*|f”?
- 17/1p. Does the empty string match the regular expression “c\*dn”?
- 18/1p. Does the string “fbb” match the regular expression “(f|fb)?”?
- 19/1p. Does the string “acacdk” match the regular expression “(ac)+|(dk)?”?
- 20/1p. Does the string “tyydd” match the regular expression “ty+d+”?
- 21/1p. Does the string “wwatat” match the regular expression “w?|at?”?
- 22/1p. Does the empty string match the regular expression “(f+tt)\*”?
- 23/1p. Does the string “b” match the regular expression “bu?|w+b”?
- 24/1p. Does the string “q” match the regular expression “(qu)+|qu?|dt?”?
- 25/1p. Does the string “hwhwgg” match the regular expression “(hw)+(gg)?|nk\*”?
- 26/1p. Does the empty string match the regular expression “((uy)?|px)?”?
- 27/1p. Does the empty string match the regular expression “(y\*ka|f)?”?
- 28/1p. Does the string “htuhtu” match the regular expression “(ht|u\*)+”?
- 29/1p. Does the string “zzzz” match the regular expression “r?zz+(bs)?”?
- 30/1p. Does the string “uu” match the regular expression “u\*|rd|hw(pa)+”?

Total points 30.

**Answer Key** (points per line)

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

Total points 30.