

**Regular Expressions**

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

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

- 1/1p. Does the empty string match the regular expression “`g*px`”?
- 2/1p. Does the empty string match the regular expression “`(gr)+q`”?
- 3/1p. Does the string “`dtty`” match the regular expression “`(dt)+y`”?
- 4/1p. Does the string “`ks`” match the regular expression “`ks+|kq`”?
- 5/1p. Does the empty string match the regular expression “`c?(fr)?`”?
- 6/1p. Does the empty string match the regular expression “`(bw?rn)*`”?
- 7/1p. Does the string “`snnnsnn`” match the regular expression “`(sn+|pp)*`”?
- 8/1p. Does the string “`nu`” match the regular expression “`dc+|(nu)?`”?
- 9/1p. Does the empty string match the regular expression “`(yk?)+`”?
- 10/1p. Does the string “`ybqu`” match the regular expression “`((yb)?qu|r)?`”?
- 11/1p. Does the string “`zth`” match the regular expression “`zt+hc*`”?
- 12/1p. Does the empty string match the regular expression “`sx(cb)*yf`”?
- 13/1p. Does the string “`qaqawz`” match the regular expression “`(qa)*wz(tg)?`”?
- 14/1p. Does the string “`xpbb`” match the regular expression “`(xp+|f)?b+`”?
- 15/1p. Does the empty string match the regular expression “`s*|a|nx`”?
- 16/1p. Does the string “`cpyw`” match the regular expression “`(cp)+|(t+|yw)?`”?
- 17/1p. Does the string “`pryfaqq`” match the regular expression “`pr+|yf(qf)?(aq)*`”?
- 18/1p. Does the string “`bw`” match the regular expression “`(bw)?|(bk)?|(x)?`”?
- 19/1p. Does the string “`uusazz`” match the regular expression “`(u*|s*az)+`”?
- 20/1p. Does the string “`tdtduqtdtduq`” match the regular expression “`(td?|uq)+|q?`”?

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Total points 20.

# QR2

**Answer Key** (points per line)

- |         |       |
|---------|-------|
| 1 (1).  | false |
| 2 (1).  | false |
| 3 (1).  | false |
| 4 (1).  | true  |
| 5 (1).  | true  |
| 6 (1).  | true  |
| 7 (1).  | true  |
| 8 (1).  | true  |
| 9 (1).  | false |
| 10 (1). | true  |
| 11 (1). | true  |
| 12 (1). | false |
| 13 (1). | true  |
| 14 (1). | true  |
| 15 (1). | true  |
| 16 (1). | false |
| 17 (1). | false |
| 18 (1). | true  |
| 19 (1). | false |
| 20 (1). | true  |

Total points 20.