Problem 1: Matchless Endeavors

Acceptable answers are shown below.

Letter

1.1 anti-dependence q
1.2 branch folding d
1.3 superscalar machine r or c
1.4 cache block identification d
1.5 instruction latency e
1.6 capacity miss j
1.7 Amdahl’s law a
1.8 500 Mhz o
1.9 memory hierarchy t or j
1.10 loop unrolling g or i
1.11 dynamic scheduling g or h
1.12 TLB t
1.13 structural hazard b or f
1.14 forwarding and bypassing g or u
1.15 dynamic scheduling g or h
1.16 dirty bits j
1.17 WAW hazard b
1.18 PDP 11, IBM 360 k (old non-RISC architectures)
1.19 reorder buffer c
1.20 implicit branch prediction z (Branch target buffer w/o pred bits)

Extra Credit

Suppose there’s a bowl of M&M’s in my office. All but four are yellow. All but four are red. All but four are green. How many M&M’s are in the bowl?

Answer 1: 6-2 green, 2 red, 2 yellow
Answer 2: 4—all any other color but red, green, or yellow