

Types of problems we've seen this quarter (section numbers are underlined, and numbers in parentheses after a section number indicate sample problems from that section):

- precalculus: Sections 1.5, 1.6
- limits: Sections 2.2, 2.3 (12, 23), 2.6 (18, 19), 4.4 (10, 28, 44) (also see Problems Plus, page 179: 2)
- continuity, differentiability: Sections 2.5 (20, 40), 2.9 (34, 41, 42) (also see Problems Plus, page 179: 7)
- definition of the derivative: Sections 2.7 (8, 10), 2.8 (21), 2.9 (21, 23, 25)
- derivative formulas: Sections 3.1, 3.2 (4, 16, 23, 40), 3.4 (13, 16, 24), 3.5 (12, 22, 41, 43, 66), 3.6 (41, 46, 49), 3.8 (12, 14, 42, 46) (also see Problems Plus, page 273: 1, 24)
- implicit differentiation: Section 3.6 (10, 18, 27, 35) (also see Section 3.7: 31)
- motion – position/velocity/acceleration: Sections 2.7, 3.7 (45, 47, 50), 4.10 (68, 74)
- related rates: Section 3.10 (6, 7, 14, 17, 18, 35)
- tangent line approximation: Section 3.11 (8, 31, 32, 36)
- curve-sketching: Sections 1.3, 2.6, 4.3, 4.5 (3, 5, 11, 33, 45)
- optimization problems: Sections 4.1 (50, 55, 58, 60, 63), 4.7 (7, 9, 11, 12, 16, 28) (also see Problems Plus, page 364: 1, 6)
- antiderivatives: Section 4.10 (12, 13, 17)