491. $y-1=2(x-2)$
492. $y+1=-\frac{1}{9}x$
493. $y-1=\frac{3}{2}(x-\frac{2}{3})$
494. $y=-\frac{1}{5}x$
495. $y-\frac{1}{6}=-\frac{7}{36}(x-1)$
496. $y-\frac{1}{5}=-\frac{25}{4}x$
497. $y-2=10(x-1)$
498. $y+6=2(x-1)$ and $y-24=10(x-5)$
499. no; f ' has a removable discontinuity at x=-5 ($-1\neq 1$)
500. no; f ' removable discontinuity at x=-2 ($-1\neq 1$)
501. no; f is not continuous so it can't be diff. ($2\neq -4$)
502. yes; f ' is equal to 0 in both cases
503. no; f ' has a removable discontinuity at x=3 ($6\neq 3$)
504. No; f ' has an infinite discontinuity at x=2
505a: 5
505b. 54
505c. 8
505d. 2
505e. 6
505f. -1