Product rule: u'v+v'u Quotient Rule: $(u'v-v'u)/v^2$

1. $f(x) = (3x - 2) /x$

   u= v=

   u'= v'=

2. $f(x) = x (2x + 1).$

   u= v=

   u'= v'=

3. $f(x) = (x^2 - 2) /(2x).$

   u= v=

   u'= v'=

4. $f(y) = (y + 1) /y^2$

   u= v=

   u'= v'=

5. $f(x) = (2x + 5)^2$

   u= v=

   u'= v'=

6. $f(x) = x^2 /(x - 1).$

   u= v=

   u'= v'=

7. $f(z) = z^2 /(2z - 7).$

   u= v=

   u'= v'=

Product rule: u'v+v'u Quotient Rule: $(u'v-v'u)/v^2$

8. $y = -2t^2 + 6t - 3$

u= v=

u'= v'=

9. $f(x) = (x + 1)(x^2 - 3)$.

u= v=

u'= v'=

10. $f(x) = (2x + 5)/(2x)$

u= v=

u'= v'=

11. $f(y) = (3y^2 - y)(2 - y)$.

u= v=

u'= v'=

12. $f(t) = (t^3 - 3t)^2$

u= v=

u'= v'=

13. $f(x) = x/(2x + 1)$.

u= v=

u'= v'=

14. take the derivative using the limit $f(x) = 3x^2 + 4$