5. Find the equation of the tangent line to the function $y = \dfrac{x^2 + x - 2}{2x}$ at the point where $x = 1$.

6. Find the equation of the normal line to the function $y = x^3 - 5x + 1$ at the point when $x = 2$.

7. Find the points on the curve $y = x^3 + 3x^2 - 9x + 7$ where the tangent line is parallel to the x-axis.

8. Consider the curve $y = x^3 + x$.

   a) Find the tangents to the curve at all the points where the slope is 4. (be careful! … it doesn't say $x = 4$!)

   b) What is the smallest slope of the curve? At what value of x does the curve have this value?

9. Find the x- and y-intercepts of the line that is tangent to the curve $y = x^3$ at the point (–2, –8).

10. If the line normal to the graph of f at the point (1, 2) passes through the point (–1, 1), then which of the following gives the value of $f'(1)$?

A	–2
B	2
C	–1/2
D	1/2
E	3