

# Math 16a – Quiz 2

Section 113, September 11, 2007

Name:

Each question is worth 3 points. You have 15 minutes.

1. A UC Berkeley student earns income by typing up math students' homework on a computer. The student's cost, in dollars, for typing up  $x$  pages is  $C(x) = .5x + 70$ . The student charges \$4 per page.

- (a) Write an expression that gives the student's profit as a function of the number of pages typed.

- (b) How many pages must the student type to break even; that is, have a profit of zero?

2. Find an equation for the line tangent to the graph of  $y = x^2$  at the point  $(-1, 1)$ .

# Math 16a – Quiz 2

Section 115, September 11, 2007

Name:

Each question is worth 3 points. You have 15 minutes.

1. A UC Berkeley student earns income by typing up math students' homework on a computer. The student's cost, in dollars, for typing up  $x$  pages is  $C(x) = .5x + 75$ . The student charges \$3 per page.

- (a) Write an expression that gives the student's profit as a function of the number of pages typed.

- (b) How many pages must the student type to break even; that is, have a profit of zero?

2. Find an equation for the line tangent to the graph of  $y = x^2$  at the point  $(-2, 4)$ .

# Math 16a – Quiz 2

Section 117, September 11, 2007

Name:

Each question is worth 3 points. You have 15 minutes.

1. A UC Berkeley student earns income by typing up math students' homework on a computer. The student's cost, in dollars, for typing up  $x$  pages is  $C(x) = .5x + 90$ . The student charges \$2 per page.

- (a) Write an expression that gives the student's profit as a function of the number of pages typed.

- (b) How many pages must the student type to break even; that is, have a profit of zero?

2. Find an equation for the line tangent to the graph of  $y = x^2$  at the point  $(-3, 9)$ .