

# Algebra

## AO41-Evaluate Quadratic Functions



Evaluate each function at a given  $x$ .

<b>1.</b> $y = x^2 + 2x + 6$ at $x = 7$ A) 20.1                      C) 351 B) 69                            D) 64	<b>6.</b> $y = -\frac{1}{3}x^2 - 4x$ at $x = 2.718$ A) -13.26                    C) -10.92 B) -10.05                    D) -13.34
<b>2.</b> $y = x^2 + 4x + 12$ at $x = 16$ A) 268.25                    C) 332 B) 76.06                      D) 80	<b>7.</b> $y = 5x^2 - 16x + 100$ at $x = 12$ A) -91.58                    C) 628 B) 152                         D) 3508
<b>3.</b> $y = 3x^2 + 0.5x + 7$ at $x = 2$ A) 32                            C) 8.75 B) 18.5                        D) 20	<b>8.</b> $y = 4x^2 - 17x$ at $x = -0.5$ A) 7.5                         C) 9.5 B) -7.5                        D) -9.5
<b>4.</b> $y = x^2 + 16x - 100$ at $x = 10$ A) 160                         C) -160 B) 70                            D) -70	<b>9.</b> $y = 2x^2 + 4x + 200$ at $x = -\sqrt{2}$ A) $-4\sqrt{2} + 204$ C) $4\sqrt{2} + 204$ B) 212                         D) 211
<b>5.</b> $y = -4x^2 + 12x$ at $x = -3$ A) 0                             C) 72 B) -72                         D) -34.67	<b>10.</b> $y = \sqrt{6}x^2 + \sqrt{3}x + 10$ at $x = \sqrt{3}$ A) $3\sqrt{15} + 10$ C) $4\sqrt{6+9} + 10$ B) $3\sqrt{6} + 13$ D) $3(\sqrt{6} + \sqrt{9}) + 10$