

Grade 11 Functions & Quadratics Unit Test

Name _____ Date _____ Score _____ / 12

Part A · Functions

01 $f(x) = 5x + 4$; $f(8) =$

Answer: _____

02 $f(x) = 6x + 6$; $f(6) =$

Answer: _____

03 $f(x) = 9x + 2$. Find $f^{-1}(x) =$

Answer: _____

04 $f(x) = 10x + 2$; $f(4) =$

Answer: _____

Part B · Solving Quadratics

05 Solve $x^2 - 16x + 63 = 0$ _____

06 Solve $x^2 - 13x + 36 = 0$ _____

Grade 11 Functions & Quadratics Unit Test

Part B · Solving Quadratics (continued)

07 Solve $x^2 + 2x - 48 = 0$ _____

08 Solve $x^2 + 7x + 6 = 0$ _____

Part C · Square Roots & Radicals

09 $\sqrt{48} =$ _____

10 $\sqrt{8} =$ _____

11 $\sqrt{112} =$ _____

12 $\sqrt{252} =$ _____

f

Grade 11 Functions & Quadratics Unit Test (Answer Key)

Part A · Functions

01 $f(x) = 5x + 4$; $f(8) =$

44

02 $f(x) = 6x + 6$; $f(6) =$

42

03 $f(x) = 9x + 2$. Find $f^{-1}(x) =$

$f^{-1}(x) = (x - 2) / 9$

04 $f(x) = 10x + 2$; $f(4) =$

42

Part B · Solving Quadratics

05 Solve $x^2 - 16x + 63 = 0$

$x = 9$ or $x = 7$

06 Solve $x^2 - 13x + 36 = 0$

$x = 9$ or $x = 4$

07 Solve $x^2 + 2x - 48 = 0$

$x = 6$ or $x = -8$

08 Solve $x^2 + 7x + 6 = 0$

$x = -1$ or $x = -6$

Part C · Square Roots & Radicals

09 **$\sqrt{48} = 4\sqrt{3}$**

10 **$\sqrt{8} = 2\sqrt{2}$**

f

Grade 11 Functions & Quadratics Unit Test (Answer Key)

Part C • Square Roots & Radicals (continued)

$$11 \quad \sqrt{112} = 4\sqrt{7}$$

$$12 \quad \sqrt{252} = 6\sqrt{7}$$