

Solutions – Change of Base Rule (A)

Change $\log_5(6)$ into logs of base 4.

$$\log_4(6) / \log_4(5)$$

Change $\log_4(15)$ into logs of base 7.

$$\log_7(15) / \log_7(4)$$

Change $\log_5(32)$ into logs of base 3.

$$\log_3(32) / \log_3(5)$$

Change $\log_2(8)$ into logs of base 5.

$$\log_5(8) / \log_5(2)$$

Change $\log_3(15)$ into logs of base 8.

$$\log_8(15) / \log_8(3)$$

Change $\log_9(5)$ into logs of base 5.

$$\log_5(5) / \log_5(9)$$

Solutions – Change of Base Rule (B)

Change $\log_2(32)$ into logs of base 3.

$$\log_3(32) / \log_3(2)$$

Change $\log_5(6)$ into logs of base 3.

$$\log_3(6) / \log_3(5)$$

Change $\log_8(12)$ into logs of base 5.

$$\log_5(12) / \log_5(8)$$

Change $\log_3(32)$ into logs of base 7.

$$\log_7(32) / \log_7(3)$$

Change $\log_2(4)$ into logs of base 3.

$$\log_3(4) / \log_3(2)$$

Change $\log_8(2)$ into logs of base 2.

$$\log_2(2) / \log_2(8)$$

Solutions – Change of Base Rule (C)

Change $\log_7(3)$ into logs of base 3.

$$\log_3(3) / \log_3(7)$$

Change $\log_9(8)$ into logs of base 6.

$$\log_6(8) / \log_6(9)$$

Change $\log_4(4)$ into logs of base 6.

$$\log_6(4) / \log_6(4)$$

Change $\log_8(2)$ into logs of base 9.

$$\log_9(2) / \log_9(8)$$

Change $\log_8(8)$ into logs of base 3.

$$\log_3(8) / \log_3(8)$$

Change $\log_7(8)$ into logs of base 5.

$$\log_5(8) / \log_5(7)$$

Solutions – Change of Base Rule (D)

Change $\log_7(15)$ into logs of base 2.

$$\log_2(15) / \log_2(7)$$

Change $\log_6(2)$ into logs of base 4.

$$\log_4(2) / \log_4(6)$$

Change $\log_6(27)$ into logs of base 5.

$$\log_5(27) / \log_5(6)$$

Change $\log_2(6)$ into logs of base 5.

$$\log_5(6) / \log_5(2)$$

Change $\log_9(2)$ into logs of base 7.

$$\log_7(2) / \log_7(9)$$

Change $\log_4(6)$ into logs of base 6.

$$\log_6(6) / \log_6(4)$$

Solutions – Change of Base Rule (E)

Change $\log_7(27)$ into logs of base 3.

$$\log_3(27) / \log_3(7)$$

Change $\log_8(2)$ into logs of base 4.

$$\log_4(2) / \log_4(8)$$

Change $\log_4(32)$ into logs of base 5.

$$\log_5(32) / \log_5(4)$$

Change $\log_6(9)$ into logs of base 4.

$$\log_4(9) / \log_4(6)$$

Change $\log_6(15)$ into logs of base 8.

$$\log_8(15) / \log_8(6)$$

Change $\log_6(5)$ into logs of base 7.

$$\log_7(5) / \log_7(6)$$

Solutions – Change of Base Rule (F)

Change $\log_9(6)$ into logs of base 3.

$$\log_3(6) / \log_3(9)$$

Change $\log_8(15)$ into logs of base 7.

$$\log_7(15) / \log_7(8)$$

Change $\log_3(9)$ into logs of base 6.

$$\log_6(9) / \log_6(3)$$

Change $\log_7(27)$ into logs of base 5.

$$\log_5(27) / \log_5(7)$$

Change $\log_9(8)$ into logs of base 6.

$$\log_6(8) / \log_6(9)$$

Change $\log_4(27)$ into logs of base 2.

$$\log_2(27) / \log_2(4)$$

Solutions – Change of Base Rule (G)

Change $\log_9(27)$ into logs of base 6.

$$\log_6(27) / \log_6(9)$$

Change $\log_4(9)$ into logs of base 3.

$$\log_3(9) / \log_3(4)$$

Change $\log_2(15)$ into logs of base 6.

$$\log_6(15) / \log_6(2)$$

Change $\log_8(12)$ into logs of base 4.

$$\log_4(12) / \log_4(8)$$

Change $\log_3(15)$ into logs of base 4.

$$\log_4(15) / \log_4(3)$$

Change $\log_9(12)$ into logs of base 5.

$$\log_5(12) / \log_5(9)$$

Solutions – Change of Base Rule (H)

Change $\log_9(9)$ into logs of base 5.

$$\log_5(9) / \log_5(9)$$

Change $\log_2(6)$ into logs of base 7.

$$\log_7(6) / \log_7(2)$$

Change $\log_2(15)$ into logs of base 9.

$$\log_9(15) / \log_9(2)$$

Change $\log_5(9)$ into logs of base 4.

$$\log_4(9) / \log_4(5)$$

Change $\log_6(6)$ into logs of base 7.

$$\log_7(6) / \log_7(6)$$

Change $\log_2(12)$ into logs of base 6.

$$\log_6(12) / \log_6(2)$$

Solutions – Change of Base Rule (I)

Change $\log_3(12)$ into logs of base 9.

$$\log_9(12) / \log_9(3)$$

Change $\log_2(2)$ into logs of base 4.

$$\log_4(2) / \log_4(2)$$

Change $\log_8(27)$ into logs of base 9.

$$\log_9(27) / \log_9(8)$$

Change $\log_6(15)$ into logs of base 8.

$$\log_8(15) / \log_8(6)$$

Change $\log_3(4)$ into logs of base 5.

$$\log_5(4) / \log_5(3)$$

Change $\log_4(7)$ into logs of base 5.

$$\log_5(7) / \log_5(4)$$

Solutions – Change of Base Rule (J)

Change $\log_4(2)$ into logs of base 7.

$$\log_7(2) / \log_7(4)$$

Change $\log_2(15)$ into logs of base 5.

$$\log_5(15) / \log_5(2)$$

Change $\log_8(8)$ into logs of base 5.

$$\log_5(8) / \log_5(8)$$

Change $\log_7(6)$ into logs of base 4.

$$\log_4(6) / \log_4(7)$$

Change $\log_6(7)$ into logs of base 7.

$$\log_7(7) / \log_7(6)$$

Change $\log_2(9)$ into logs of base 8.

$$\log_8(9) / \log_8(2)$$