PRINTABLE VERSION

Quiz 24

Question 1

Solve for x:

$$\log_4(-10\,x+9)=\log_4(19)$$

a) $x=\frac{10}{19}$

b) $x=-\frac{14}{5}$

c) $x=-1$

d) $x=\frac{29}{9}$

e) $x=1$

f) None of the above

Question 2

Solve for x:

$$log_{343}x=\frac{1}{3}$$

a) $x=\frac{1}{7}$

b) $x=3$

c) $x=\sqrt[3]{7}$

d) $x=2187$

e) $x=7$

f) None of the above

Question 3

Solve:

$$log_2(16 - x) = 2$$

a) $x = 0$

b) $x = 2$

c) $x = 12$

d) $x = -12$

e) $x = 20$

f) None of the above

Question 4

Solve for x:

$$log_4(x) + log_4(x + 2) = log_4(8)$$

a) $x = 2$

b) $x = -4$

c) $x = -4, x = 2$

d) $x = 3$

e) $x = 4, x = -2$

f) None of the above

Question 5

Solve for x:

$$ln(x + 2) + ln(x + 5) = ln(4)$$

a) $x = -1$

b) $x = 1$

c) $x = 1, x = 6$

d) $x = -1, x = -6$

e) $x = -6$

f) None of the above

Question 6

Solve for x:

$$log_9(x+6) + log_9(x+4) = \frac{1}{2}$$

a) $x = 3$

b) $x = -3$

c) $x = -7$

d) $x = -3, x = -7$

e) $x = 3, x = 7$

f) None of the above

Question 7

Solve for x:

$$log_2(-3\,x+8) - log_2(x+7) = 0$$

a) $x = \frac{1}{4}$

b) $x = \frac{1}{3}$

c) $x = \frac{1}{2}$

d) $x = \frac{15}{4}$

e) $x = \frac{15}{2}$

f) None of the above

Question 8

Solve for x:

$$5log_4\left(-3\,x+3\right) - 2 = 8$$

a) $x = \frac{47}{48}$

b) $x = -\frac{49}{48}$

c) $x = -\frac{19}{3}$

d) $x = -\frac{13}{3}$

e) $x = \frac{19}{3}$

f) None of the above

Question 9

Solve for x:

$$\log_5(x+9) - \log_5(x-2) = \log_5(9)$$

a) $x = 3$

b) $x = \frac{27}{10}$

c) $x = -\frac{27}{8}$

d) $x = \frac{27}{8}$

e) $x = \frac{8}{27}$

f) None of the above

Question 10

Solve for x:

$$\log_4(x+4) - \log_4(x+1) = 2$$

a) $x = -\frac{12}{17}$

b) $x = \frac{4}{5}$

c) $x = -\frac{5}{4}$

d) $x = \frac{20}{17}$

e) $x = -\frac{4}{5}$

f) None of the above