

Integration previous test

Maths 3c

Basic integration technique.

Name: _____

Integrate these functions.

1.

$$f(x) = x^2$$

2.

$$g(x) = x^3$$

3.

$$h(x) = x$$

4.

$$i(x) = x + 4$$

5.

$$j(x) = 3x$$

6.

$$k(x) = 2x + 7$$

7.

$$l(x) = 3x + 5x$$

8.

$$m(x) = x^2 + 3x + 11$$

9.

$$n(x) = \frac{1}{x}$$

10.

$$o(x) = \frac{1}{x^2}$$

11.

$$p(x) = \frac{1}{x^3}$$

12.

$$q(x) = \cos x$$

13.

$$r(x) = -\sin x$$

14.

$$s(x) = \sin x$$

15.

$$t(x) = \sqrt{x}$$

16.

$$u(x) = \sqrt[3]{x}$$

17.

$$v(x) = \sqrt[4]{x^3}$$

18.

$$w(x) = \frac{1}{\sqrt{x}}$$

19.

$$x(x) = 7x^3 + 4x^2 + 3x + 2$$

20.

$$y(x) = \frac{2x + 5}{4}$$

21.

$$z(x) = \frac{3x^3 + 2x^2 + x + 11}{7}$$

22.

$$a(x) = \frac{4x^3 + 6}{x^4 + 6x + 4}$$

23.

$$b(x) = \frac{x}{2x^2 + 210}$$

24.

$$c(x) = \frac{1}{x \ln x}$$