

Calculus Practice: Indefinite Integrals 2b**Evaluate each indefinite integral.**

1) $\int \frac{40x^{\frac{1}{3}}}{3} dx$

2) $\int \frac{130x^{\frac{8}{5}}}{5} dx$

3) $\int \frac{84x^{\frac{9}{5}}}{5} dx$

4) $\int -\frac{153x^{\frac{10}{7}}}{7} dx$

5) $\int \left(\frac{39x^{\frac{9}{4}}}{4} + \frac{112x^{\frac{7}{9}}}{9} - \frac{7x^{\frac{2}{5}}}{5} \right) dx$

6) $\int \frac{924x^{\frac{6}{5}} + 1715x^{\frac{3}{4}} - 1440x^{\frac{1}{7}}}{140} dx$

7) $\int \frac{77x^{\frac{7}{4}} - 240x^{\frac{5}{7}}}{14} dx$

8) $\int \left(-\frac{88x^{\frac{9}{2}}}{2} + \frac{17x^{\frac{9}{8}}}{8} + \frac{66x^{\frac{4}{7}}}{7} \right) dx$

9) $\int \frac{8x^{\frac{1}{7}}}{7} dx$

10) $\int \frac{-1323x^{\frac{5}{2}} + 238x^{\frac{8}{9}} - 396x^{\frac{4}{7}}}{42} dx$

$$11) \int \left(\frac{11\sqrt[6]{x^5}}{6} + \frac{117\sqrt[8]{x^5}}{8} + \frac{44\sqrt[10]{x}}{5} \right) dx$$

$$12) \int \frac{55\sqrt[8]{x^3}}{8} dx$$

$$13) \int \left(\frac{50\sqrt[7]{x^3}}{7} - \frac{90\sqrt[7]{x^2}}{7} \right) dx$$

$$14) \int \left(\frac{36\sqrt[7]{x^2}}{7} + \frac{28\sqrt[6]{x}}{3} \right) dx$$

$$15) \int \frac{-120\sqrt[7]{x^5} + 91\sqrt[10]{x^3} + 120\sqrt[7]{x}}{35} dx$$

$$16) \int \left(\frac{66\sqrt[7]{x^4}}{7} + \frac{99\sqrt[8]{x^3}}{8} + \frac{10\sqrt[9]{x}}{9} \right) dx$$

$$17) \int \left(-\frac{96\sqrt[7]{x^5}}{7} + \frac{110\sqrt[7]{x^4}}{7} + \frac{100\sqrt[7]{x^3}}{7} \right) dx$$

$$18) \int \frac{28\sqrt[9]{x^5}}{3} dx$$

$$19) \int -\frac{64\sqrt[7]{x}}{7} dx$$

$$20) \int \frac{-80\sqrt[7]{x^3} + 98\sqrt[6]{x} + 189\sqrt[8]{x}}{28} dx$$

Calculus Practice: Indefinite Integrals 2b

Evaluate each indefinite integral.

$$1) \int \frac{40x^{\frac{1}{3}}}{3} dx$$

$$10x^{\frac{4}{3}} + C$$

$$2) \int \frac{130x^{\frac{8}{5}}}{5} dx$$

$$10x^{\frac{13}{5}} + C$$

$$3) \int \frac{84x^{\frac{9}{5}}}{5} dx$$

$$6x^{\frac{14}{5}} + C$$

$$4) \int -\frac{153x^{\frac{10}{7}}}{7} dx$$

$$-9x^{\frac{17}{7}} + C$$

$$5) \int \left(\frac{39x^{\frac{9}{4}}}{4} + \frac{112x^{\frac{7}{9}}}{9} - \frac{7x^{\frac{2}{5}}}{5} \right) dx$$

$$3x^{\frac{13}{4}} + 7x^{\frac{16}{9}} - x^{\frac{7}{5}} + C$$

$$6) \int \frac{924x^{\frac{6}{5}} + 1715x^{\frac{3}{4}} - 1440x^{\frac{1}{7}}}{140} dx$$

$$3x^{\frac{11}{5}} + 7x^{\frac{7}{4}} - 9x^{\frac{8}{7}} + C$$

$$7) \int \frac{77x^{\frac{7}{4}} - 240x^{\frac{5}{7}}}{14} dx$$

$$2x^{\frac{11}{4}} - 10x^{\frac{12}{7}} + C$$

$$8) \int \left(-\frac{88x^{\frac{9}{2}}}{2} + \frac{17x^{\frac{9}{8}}}{8} + \frac{66x^{\frac{4}{7}}}{7} \right) dx$$

$$-8x^{\frac{11}{2}} + x^{\frac{17}{8}} + 6x^{\frac{11}{7}} + C$$

$$9) \int \frac{8x^{\frac{1}{7}}}{7} dx$$

$$x^{\frac{8}{7}} + C$$

$$10) \int \frac{-1323x^{\frac{5}{2}} + 238x^{\frac{8}{9}} - 396x^{\frac{4}{7}}}{42} dx$$

$$-9x^{\frac{7}{2}} + 3x^{\frac{17}{9}} - 6x^{\frac{11}{7}} + C$$

$$11) \int \left(\frac{11\sqrt[6]{x^5}}{6} + \frac{117\sqrt[8]{x^5}}{8} + \frac{44\sqrt[10]{x}}{5} \right) dx$$

$$x^{\frac{11}{6}} + 9x^{\frac{13}{8}} + 8x^{\frac{11}{10}} + C$$

$$12) \int \frac{55\sqrt[8]{x^3}}{8} dx$$

$$5x^{\frac{11}{8}} + C$$

$$13) \int \left(\frac{50\sqrt[7]{x^3}}{7} - \frac{90\sqrt[7]{x^2}}{7} \right) dx$$

$$5x^{\frac{10}{7}} - 10x^{\frac{9}{7}} + C$$

$$14) \int \left(\frac{36\sqrt[7]{x^2}}{7} + \frac{28\sqrt[6]{x}}{3} \right) dx$$

$$4x^{\frac{9}{7}} + 8x^{\frac{7}{6}} + C$$

$$15) \int \frac{-120\sqrt[7]{x^5} + 91\sqrt[10]{x^3} + 120\sqrt[7]{x}}{35} dx$$

$$-2x^{\frac{12}{7}} + 2x^{\frac{13}{10}} + 3x^{\frac{8}{7}} + C$$

$$16) \int \left(\frac{66\sqrt[7]{x^4}}{7} + \frac{99\sqrt[8]{x^3}}{8} + \frac{10\sqrt[9]{x}}{9} \right) dx$$

$$6x^{\frac{11}{7}} + 9x^{\frac{11}{8}} + x^{\frac{10}{9}} + C$$

$$17) \int \left(-\frac{96\sqrt[7]{x^5}}{7} + \frac{110\sqrt[7]{x^4}}{7} + \frac{100\sqrt[7]{x^3}}{7} \right) dx$$

$$-8x^{\frac{12}{7}} + 10x^{\frac{11}{7}} + 10x^{\frac{10}{7}} + C$$

$$18) \int \frac{28\sqrt[9]{x^5}}{3} dx$$

$$6x^{\frac{14}{9}} + C$$

$$19) \int -\frac{64\sqrt[7]{x}}{7} dx$$

$$-8x^{\frac{8}{7}} + C$$

$$20) \int \frac{-80\sqrt[7]{x^3} + 98\sqrt[6]{x} + 189\sqrt[8]{x}}{28} dx$$

$$-2x^{\frac{10}{7}} + 3x^{\frac{7}{6}} + 6x^{\frac{9}{8}} + C$$