**Evaluate the expression for the given value of the variable.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | $$\frac{16}{n}+2^{3}-10 when n=8$$ |  | $$r^{5}-12÷r when r=3$$ |
|  | $$b+6÷4 when b=1.5$$ |  | $$3r^{2}-17 when r=6$$ |
|  | $$27-\frac{24}{b} when b=8$$ |  | $$\frac{9}{10}⋅y-\frac{3}{10} when y=\frac{1}{2}$$ |
|  | $$2⋅x^{3}+4 when x=3$$ |  | $$8a when a=4$$ |
|  | $$\frac{4}{3}⋅x when x=\frac{1}{6}$$ |  | $$\frac{24}{x} when x=3$$ |
|  | $$\frac{5}{16}-p when p=\frac{3}{8}$$ |  | $$\left(6w\right)^{2} when w=5$$ |
|  | $$5s^{2} when s=16$$ |  | $$4\left(t^{3}\right) when t=3$$ |
|  | $$\left(7x\right)^{3} when x=2$$ |  |  |

**Evaluate the expression for the given value of the variable.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | $$\frac{r^{2}-3}{4r} when r=3$$ |  | $$\frac{6x-3}{7+\left(x^{3}-1\right)} when x=1$$ |
|  | $$\frac{\left(9-x\right)^{2}+4}{5} when x=3$$ |  | $$\frac{y^{5}-12}{y\left(z^{2}-5\right)} when y=2 and z=5$$ |
|  | $$\frac{2\left(17+2x\right)}{y^{2}-11} when x=4 and y=6$$ |  |  |

**ANSWER**

**Evaluate the expression for the given value of the variable.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | $$\frac{16}{n}+2^{3}-10 when n=8$$$$=\frac{16}{8}+2^{3}-10$$$$=2+8-10$$$$=10-10$$$$=0$$ |  | $$r^{5}-12÷r when r=3$$$$=3^{5}-12÷3$$$$=243-\frac{12}{3}$$$$=243-4$$$$=239$$ |
|  | $$b+6÷4 when b=1.5$$$$=1.5+6÷4$$$$=1.5+\frac{6}{4}$$$$=1.5+1.5$$$$=3$$ |  | $$3r^{2}-17 when r=6$$$$=3⋅6^{2}-17$$$$=3⋅36-17$$$$=108-17$$$$=91$$ |
|  | $$27-\frac{24}{b} when b=8$$$$=27-\frac{24}{8}$$$$=27-3$$$$=24$$ |  | $$\frac{9}{10}⋅y-\frac{3}{10} when y=\frac{1}{2}$$$$=\frac{9}{10}⋅\frac{1}{2}-\frac{3}{10}$$$$=\frac{9}{20}-\frac{3}{10}$$$$=\frac{9}{20}-\frac{6}{20}$$$$=\frac{3}{20}$$ |
|  | $$2⋅x^{3}+4 when x=3$$$$=2⋅3^{3}+4$$$$=2⋅27+4$$$$=54+4$$$$=58$$ |  | $$8a when a=4$$$$=8⋅4$$$$=32$$ |

|  |  |  |  |
| --- | --- | --- | --- |
|  | $$\frac{4}{3}⋅x when x=\frac{1}{6}$$$$=\frac{4}{3}⋅\frac{1}{6}$$$$=\frac{4}{18}$$$$=\frac{2}{9}$$ |  | $$\frac{24}{x} when x=3$$$$=\frac{24}{3}$$$$=8$$ |
|  | $$\frac{5}{16}-p when p=\frac{3}{8}$$$$=\frac{5}{16}-\frac{3}{8}$$$$=\frac{5}{16}-\frac{6}{16}$$$$=-\frac{1}{16}$$ |  | $$\left(6w\right)^{2} when w=5$$$$=\left(6⋅5\right)^{2}$$$$=30^{2}$$$$=900$$ |
|  | $$5s^{2} when s=16$$$$=5⋅16^{2}$$$$=5⋅256$$$$=1280$$ |  | $$4\left(t^{3}\right) when t=3$$$$=4\left(3^{3}\right)$$$$=4\left(27\right)$$$$=108$$ |
|  | $$\left(7x\right)^{3} when x=2$$$$=\left(7⋅2\right)^{3}$$$$=14^{3}$$$$=2744$$ |  |  |

**Evaluate the expression for the given value of the variable.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | $$\frac{r^{2}-3}{4r} when r=3$$$$=\frac{3^{2}-3}{4\left(3\right)}$$$$=\frac{9-3}{12}$$$$=\frac{6}{12}$$$$=\frac{1}{2}$$ |  | $$\frac{6x-3}{7+\left(x^{3}-1\right)} when x=1$$$$=\frac{6⋅1-3}{7+\left(1^{3}-1\right)}$$$$=\frac{6-3}{7+\left(1-1\right)}$$$$=\frac{3}{7}$$ |
|  | $$\frac{\left(9-x\right)^{2}+4}{5} when x=3$$$$=\frac{\left(9-3\right)^{2}+4}{5}$$$$=\frac{6^{2}+4}{5}$$$$=\frac{36+4}{5}$$$$=\frac{40}{5}$$$$=8$$ |  | $$\frac{y^{5}-12}{y\left(z^{2}-5\right)} when y=2 and z=5$$$$=\frac{2^{5}-12}{2\left(5^{2}-5\right)}$$$$=\frac{32-12}{2\left(25-5\right)}$$$$=\frac{20}{2\left(20\right)}$$$$=\frac{1}{2}$$ |
|  | $$\frac{2\left(17+2x\right)}{y^{2}-11} when x=4 and y=6$$$$=\frac{2\left(17+2\left(4\right)\right)}{6^{2}-11}$$$$=\frac{2\left(17+8\right)}{36-11}$$$$=\frac{3\left(25\right)}{25}$$$$=3$$ |  |  |