

Solutions to WS 8.1 - Evaluating Expressions with Exponents, #2-34 even

$\textcircled{2} 5^2 = 5 \cdot 5$ $= \textcircled{25}$	$\textcircled{4} 6^3 = 6 \cdot 6 \cdot 6$ $= \textcircled{216}$	$\textcircled{6} (0.02)^2 = 0.02 \cdot 0.02$ $= \textcircled{0.004}$	$\textcircled{8} \left(\frac{1}{3}\right)^3 = \frac{1}{3} \cdot \frac{1}{3} \cdot \frac{1}{3}$ $= \textcircled{\frac{1}{27}}$
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$\textcircled{10} -(5)^2$ $= -5 \cdot 5$ $= \textcircled{-25}$	$\textcircled{12} -(-2)^4$ $= -(-2 \cdot -2 \cdot -2 \cdot -2)$ $= -16$ $= \textcircled{-16}$	$\textcircled{14} 4(6-10)^2$ $= 4(-4)^2$ $= 4(16)$ $= \textcircled{64}$	$\textcircled{16} -2(2+3)^2$ $= -2(5)^2$ $= -2(25)$ $= \textcircled{-50}$	$\textcircled{18} 2(3-5)^3$ $= 2(-2)^3$ $= 2(-8)$ $= \textcircled{-16}$
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$\textcircled{20} z^2, \text{ for } z = -3$ $= (-3)^2$ $= \textcircled{9}$	$\textcircled{22} m^3, \text{ for } m = -1$ $= (-1)^3$ $= \textcircled{-1}$	$\textcircled{24} x^3 + y^2 + z, \text{ for } x = -1, y = 2, z = 3$ $= (-1)^3 + (2)^2 + (3)$ $= -1 + 4 + 3$ $= \textcircled{6}$
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$\textcircled{26} w^4 + x^2, \text{ if } w = \frac{1}{3}, x = \frac{3}{9}$ $= \left(\frac{1}{3}\right)^4 + \left(\frac{3}{9}\right)^2$ $= \left(\frac{1}{3}\right)^4 + \left(\frac{1}{3}\right)^2$ $= \frac{1}{81} + \frac{1}{9}$ $= \textcircled{\frac{10}{81}}$	$\textcircled{28} S = \frac{1}{2}gt^2, \text{ for } g = 32, t = 2$ $S = \frac{1}{2}(32)(2)^2$ $S = \frac{1}{2}(32)(4)$ $S = 16(4)$ $\textcircled{S = 64}$
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<p>#30-34, Evaluate each expression for <math>a=3</math> <math>b=4</math> <math>c=-1</math></p>	$\textcircled{30} a \cdot a \cdot b \cdot b$ $= (3)(3)(4)(4)$ $= \textcircled{144}$	$\textcircled{32} b \cdot b \cdot c \cdot c \cdot c$ $= (4)(4)(-1)(-1)(-1)$ $= \textcircled{-16}$	$\textcircled{34} (b \cdot b) \cdot (c \cdot c \cdot c)$ $= (4 \cdot 4) \cdot (-1 \cdot -1 \cdot -1)$ $= 16 \cdot -1$ $= \textcircled{-16}$
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