

# תרגול פסיכומטרי - חזקות ושורשים 6



**.1**  $b \neq 0$  ;  $a > 0$  ;  $a^{4b+2} = a^2 \cdot 81^b$   
 $a = ?$

3b (4)                      9 (3)                      b (2)                      3 (1)

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**.2**  $a \neq 0,1$  ;  $\left(\sqrt[3]{a^{12}}\right)^{6x} = 1$   
 $x = ?$

0 (4)                       $\frac{1}{6}$  (3)                      1 (2)                      2 (1)

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**.3**  $27^x \cdot 9 = 3^{2x}$   
 $x = ?$

-2 (4)                      -1 (3)                      2 (2)                      1 (1)

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**.4**  $\frac{27^3 \cdot 81^2}{9} = ?$

$3^{15}$  (4)                       $3^{17}$  (3)                       $9^{13}$  (2)                       $27^4$  (1)

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**.5**  $\frac{(-12)^5 \cdot (-3)^5}{9^5 \cdot (-2)^5} = ?$

64 (4)                      -32 (3)                      32 (2)                      -16 (1)

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**.6**  $\sqrt[10]{\left((a^2)^3\right)^5} \cdot \sqrt[10]{\left((b^3)^{2.5}\right)^4} = ?$

$a^3 \cdot b^3$  (4)                       $a^3 \cdot b$  (3)                       $(a \cdot b)^{10}$  (2)                       $\sqrt[3]{a \cdot b}$  (1)

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