

**20.11.2020**

**Fișă de autoevaluare**  
**Compararea puterilor**

**1.** Comparați următoarele numere:.

- a)  $3^4$      $4^3$
- b)  $2^5$      $5^2$
- c)  $1^{42}$     $4^1$
- d)  $9^2$      $101^1$
- e)  $25^0$     $0^{31}$
- f)  $2^6$      $4^3$

**2.** Comparați puterile următoare

- a)  $26^{54}$      $26^{45}$
- b)  $32^{79}$      $23^{79}$
- c)  $1^{2009}$      $2010^0$
- d)  $1^{2009}$      $2009^1$
- e)  $2009^0$      $0^{2009}$

**3.** Comparați puterile

- |                        |                   |                   |
|------------------------|-------------------|-------------------|
| a) $78^{79}$ $78^{11}$ | c) $5^{18}$ $5^2$ | e) $2^{25}$ $2^1$ |
| b) $2^3$ $5^3$         | d) $21^2$ $2^2$   | f) $15^3$ $7^3$   |

**4.** Comparați puterile:

- |                            |                          |                      |
|----------------------------|--------------------------|----------------------|
| a) $3^{2304}$ $3^{3204}$ ; | b) $1242^9$ $1424^9$ ;   | c) $0^{333}$ $0^3$ ; |
| d) $9^2$ $3^4$ ;           | e) $1^{344}$ $1^{433}$ ; | f) $4^2$ $3^3$ ;     |
| g) $889^3$ $998^3$         | h) $2009^0$ $2008^0$ .   |                      |

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**5.** Comparați următoarele numere, scriindu-le ca puteri cu aceeași bază  
(completați căsuțele pentru justificarea răspunsului)

- a)  $4^{12}$                    $8^7$  ;  
 $(2 \quad )^{12}$                $(2 \quad )^7$   
 $2$                            $2$
- b)  $32^{60}$                    $64^{50}$   
 $(2 \quad )^{60}$                $(2 \quad )^{50}$   
 $2$                            $2$
- c)  $27^{11}$                    $9^{16}$   
 $(3 \quad )^{11}$                $(3 \quad )^{16}$   
 $3$                            $3$
- h)  $25^{25}$                    $125^{15}$   
 $(5 \quad )^{25}$                $(5 \quad )^{15}$   
 $5$                            $5$

**6.** Comparați următoarele numere, scriindu-le ca puteri cu același exponent:  
(completați căsuțele pentru justificarea răspunsului)

- a)  $5^{14}$                    $2^{35}$   
 $5^2 \cdot$                    $2^5 \cdot$   
 $(5^2)$                    $(2^5)$   
 $( \quad )$                    $( \quad )$
- b)  $3^{15}$                    $2^{20}$   
 $3^3 \cdot$                    $3^4 \cdot$   
 $(3^3)$                    $( \quad^4)$   
 $( \quad )$                    $( \quad )$

20.11.2020**7. Comparați puterile:**

|             |  |             |
|-------------|--|-------------|
| $5^{677}$   |  | $5^{766}$   |
| $4^{1021}$  |  | $4^{1012}$  |
| $455^2$     |  | $544^2$     |
| $56^{2030}$ |  | $56^{2303}$ |
| $67^{23}$   |  | $67^{32}$   |
| $1^{2345}$  |  | $1^{23}$    |
| $689^0$     |  | $89^0$      |

|             |  |             |
|-------------|--|-------------|
| $8^2$       |  | $4^3$       |
| $1^{345}$   |  | $0^{345}$   |
| $122^{122}$ |  | $123^{122}$ |
| $5^2$       |  | $2^4$       |
| $0^{67}$    |  | $0^{68}$    |
| $94^{2002}$ |  | $94^{2020}$ |
| $11^2$      |  | $4^3$       |

|            |  |            |
|------------|--|------------|
| $4564^1$   |  | $456^1$    |
| $2^2$      |  | $4^1$      |
| $333^{33}$ |  | $333^{44}$ |
| $54^{34}$  |  | $55^{34}$  |
| $8^{3003}$ |  | $8^{3300}$ |
| $1^{1999}$ |  | $1^{19}$   |
| $0^{544}$  |  | $1^{455}$  |