PGCD

Consigne : Calculer les PGCD suivants.

PGCD(12 ; 9)	PGCD(18 ; 12)	PGCD(150 ; 50)
PGCD(4 ; 10)	PGCD(108 ; 24)	PGCD(90 ; 100)
PGCD(4 546 ; 195)	PGCD(12 ; 300)	PGCD(1 056 ; 330)
PGCD(220 ; 15)	PGCD(750 ; 160)	PGCD(3 300 ; 440)
PGCD(140 ; 63)	PGCD(270 ; 120)	PGCD(1 050 ; 8)
PGCD(30 492 ; 44 ; 50)	PGCD(70 ; 10 ; 40)	PGCD(595 ; 85 ; 300)
PGCD(11 ; 13 ; 27)	PGCD(222 ; 666 ; 888)	

PGCD

Correction

Consigne : Calculer les PGCD suivants.

PGCD(12 ; 9) $12 = 2^2 \times 3$ $9 = 3^2$ PGCD(12 ; 9) = 3	PGCD(18 ; 12) $18 = 2 \times 3^2$ $12 = 2^2 \times 3$ PGCD(18 ; 12) = $2 \times 3 = 6$	PGCD(150 ; 50) $150 = 2 \times 3 \times 5^2$ $50 = 2 \times 5^2$ PGCD(150 ; 50) = $2 \times 5^2 = 50$
PGCD(4 ; 10) $4 = 2^2$ $10 = 2 \times 5$ PGCD(4 ; 10) = 2	PGCD(108 ; 24) $108 = 2^2 \times 3^3$ $24 = 2^3 \times 3$ PGCD(108 ; 24) = $2^2 \times 3 = 12$	PGCD(90 ; 100) $90 = 2 \times 3^2 \times 5$ $100 = 2^2 \times 5^2$ PGCD(90 ; 100) = $2 \times 5 = 10$
PGCD(4 546 ; 195) $4\,546 = 2 \times 2273$ $195 = 3 \times 5 \times 13$ PGCD(4 546 ; 195) = 1	PGCD(12 ; 300) $12 = 2^2 \times 3$ $300 = 2^2 \times 3 \times 5^2$ PGCD(12 ; 300) = $2^2 \times 3 = 12$	PGCD(1 056 ; 330) $1\,056 = 2^5 \times 3 \times 11$ $330 = 2 \times 3 \times 5 \times 11$ PGCD(1 056 ; 330) $= 2 \times 3 \times 11 = 66$
PGCD(220 ; 15) $220 = 2^2 \times 5 \times 11$ $15 = 3 \times 5$ PGCD(220 ; 15) = 5	PGCD(750 ; 160) $750 = 2 \times 3 \times 5^3$ $160 = 2^5 \times 5$ PGCD(750 ; 160) = $2 \times 5 = 10$	PGCD(3 300 ; 440) $3\,300 = 2^2 \times 3 \times 5^2 \times 11$ $440 = 2^3 \times 5 \times 11$ PGCD(3 300 ; 440) = $2^2 \times 11 \times 5 = 220$
PGCD(140 ; 63) $140 = 2^2 \times 5 \times 7$ $63 = 3^2 \times 7$ PGCD(140 ; 63) = 7	PGCD(270 ; 120) $270 = 2 \times 3^3 \times 5$ $120 = 2^3 \times 3 \times 5$ PGCD(270 ; 120) = $2 \times 5 \times 3$ $= 30$	PGCD(1 050 ; 8) $1\,050 = 2 \times 3 \times 5^2 \times 7$ $8 = 2^3$ PGCD(1 050 ; 8) = 2
PGCD(30 492 ; 44 ; 50) $30\,492 = 2^2 \times 3^2 \times 7 \times 11^2$ $44 = 2^2 \times 11$ $50 = 2 \times 5^2$ PGCD(30 492 ; 44 ; 50) = 2	PGCD(70 ; 10 ; 40) $70 = 2 \times 5 \times 7$ $10 = 2 \times 5$ $40 = 2^3 \times 5$ PGCD(70 ; 10 ; 40) = 2×5 $= 10$	PGCD(595 ; 85 ; 300) $595 = 5 \times 7 \times 17$ $85 = 5 \times 17$ $300 = 2^2 \times 3 \times 5^2$ PGCD(595 ; 85 ; 300) = 5

PGCD(11 ; 13 ; 27) $11 = 11$ $13 = 13$ $27 = 3 \times 3 \times 3$ PGCD(11 ; 13 ; 27) = 1	PGCD(222 ; 666 ; 888) $222 = 2 \times 3 \times 37$ $666 = 2 \times 3^2 \times 37$ $888 = 2^3 \times 3 \times 37$ PGCD(222 ; 666 ; 888) $= 2 \times 3 \times 37$ $= 222$	