razlika kvadrata

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SMŠ Žepče

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$$25a^2 - 9b^2$$

$$25a^2 - 9b^2 \quad = \quad (5a)^2 - (3b)^2$$

$$
\begin{aligned}
25a^2 - 9b^2 &= (5a)^2 - (3b)^2 \\
&= (5a - 3b)(5a + 3b)
\end{aligned}
$$

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\begin{aligned}
25a^2 - 9b^2 &= (5a)^2 - (3b)^2 \\
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$$(2x - 3y)(2x + 3y)$$

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25a^2 - 9b^2 &= (5a)^2 - (3b)^2 \\
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25a^2 - 9b^2 &= (5a)^2 - (3b)^2 \\
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$$
\begin{aligned}
(2x - 3y)(2x + 3y) &= (2x)^2 - (3y)^2 \\
&= 4x^2 - 9y^2
\end{aligned}
$$

$$9 - x^2$$
$$16 - y^2$$
$$25x^2 - 1$$
$$1 - 16a^2$$
$$a^2 - 9b^2$$
$$16a^2 - 5b^2$$
$$100a^2 - 121b^2$$
$$\frac{1}{4} - 9b^2$$
$$\frac{81}{25}m^2 - \frac{16}{9}n^2$$
$$4x^2 - 49y^2$$

Faktoriziraj prema formuli za razliku kvadrata

$$9 - x^2 \quad = \quad (3 - x)(3 + x)$$

$$16 - y^2$$

$$25x^2 - 1$$

$$1 - 16a^2$$

$$a^2 - 9b^2$$

$$16a^2 - 5b^2$$

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\frac{1}{4} - 9b^2 &= \left(\frac{1}{2} - 3b\right)\left(\frac{1}{2} + 3b\right) \\
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\frac{81}{25}m^2 - \frac{16}{9}n^2 &= (\frac{9}{5}m - \frac{4}{3}n)(\frac{9}{5}m + \frac{4}{3}n) \\
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\frac{81}{25}m^2 - \frac{16}{9}n^2 &= \left(\frac{9}{5}m - \frac{4}{3}n\right)\left(\frac{9}{5}m + \frac{4}{3}n\right) \\
4x^2 - 49y^2 &= (2x - 7y)(2x + 7y)
\end{aligned}
$$

$$(x - 8y)(x + 8y)$$
$$(3a - 2b)(3a + 2b)$$
$$(\frac{2}{3}a + \frac{1}{2}b)(\frac{2}{3}a - \frac{1}{2}b)$$
$$(7a - 1)(7a + 1)$$
$$(2x - 5y)(2x + 5y)$$
$$(\frac{1}{5}c - \frac{3}{2}d)(\frac{1}{5}c + \frac{3}{2}d)$$
$$(4a - 3b)(4a + 3b)$$
$$(10a - 11b)(10a + 11b)$$
$$(\frac{2}{7}a - \frac{1}{3}b)(\frac{2}{7}c + \frac{1}{3}b)$$
$$(a^2b^2 - 2)(a^2b^2 + 2)$$

$$
\begin{aligned}
(x - 8y)(x + 8y) &= x^2 - 64y^2 \\
(3a - 2b)(3a + 2b) & \\
(\tfrac{2}{3}a + \tfrac{1}{2}b)(\tfrac{2}{3}a - \tfrac{1}{2}b) & \\
(7a - 1)(7a + 1) & \\
(2x - 5y)(2x + 5y) & \\
(\tfrac{1}{5}c - \tfrac{3}{2}d)(\tfrac{1}{5}c + \tfrac{3}{2}d) & \\
(4a - 3b)(4a + 3b) & \\
(10a - 11b)(10a + 11b) & \\
(\tfrac{2}{7}a - \tfrac{1}{3}b)(\tfrac{2}{7}c + \tfrac{1}{3}b) & \\
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\begin{aligned}
(x - 8y)(x + 8y) &= x^2 - 64y^2 \\
(3a - 2b)(3a + 2b) &= 9a^2 - 4b^2 \\
(\frac{2}{3}a + \frac{1}{2}b)(\frac{2}{3}a - \frac{1}{2}b) & \\
(7a - 1)(7a + 1) & \\
(2x - 5y)(2x + 5y) & \\
(\frac{1}{5}c - \frac{3}{2}d)(\frac{1}{5}c + \frac{3}{2}d) & \\
(4a - 3b)(4a + 3b) & \\
(10a - 11b)(10a + 11b) & \\
(\frac{2}{7}a - \frac{1}{3}b)(\frac{2}{7}c + \frac{1}{3}b) & \\
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Zapiši kao razliku kvadrata

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\begin{aligned}
(x - 8y)(x + 8y) &= x^2 - 64y^2 \\
(3a - 2b)(3a + 2b) &= 9a^2 - 4b^2 \\
(\frac{2}{3}a + \frac{1}{2}b)(\frac{2}{3}a - \frac{1}{2}b) &= \frac{4}{9}a^2 - \frac{1}{4}b^2 \\
(7a - 1)(7a + 1) & \\
(2x - 5y)(2x + 5y) & \\
(\frac{1}{5}c - \frac{3}{2}d)(\frac{1}{5}c + \frac{3}{2}d) & \\
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(x - 8y)(x + 8y) &= x^2 - 64y^2 \\
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(7a - 1)(7a + 1) &= 49a^2 - 1 \\
(2x - 5y)(2x + 5y) & \\
(\tfrac{1}{5}c - \tfrac{3}{2}d)(\tfrac{1}{5}c + \tfrac{3}{2}d) & \\
(4a - 3b)(4a + 3b) & \\
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\begin{aligned}
(x - 8y)(x + 8y) &= x^2 - 64y^2 \\
(3a - 2b)(3a + 2b) &= 9a^2 - 4b^2 \\
(\frac{2}{3}a + \frac{1}{2}b)(\frac{2}{3}a - \frac{1}{2}b) &= \frac{4}{9}a^2 - \frac{1}{4}b^2 \\
(7a - 1)(7a + 1) &= 49a^2 - 1 \\
(2x - 5y)(2x + 5y) &= 4x^2 - 25y^2 \\
(\frac{1}{5}c - \frac{3}{2}d)(\frac{1}{5}c + \frac{3}{2}d) & \\
(4a - 3b)(4a + 3b) & \\
(10a - 11b)(10a + 11b) & \\
(\frac{2}{7}a - \frac{1}{3}b)(\frac{2}{7}c + \frac{1}{3}b) & \\
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(7a - 1)(7a + 1) &= 49a^2 - 1 \\
(2x - 5y)(2x + 5y) &= 4x^2 - 25y^2 \\
(\frac{1}{5}c - \frac{3}{2}d)(\frac{1}{5}c + \frac{3}{2}d) &= \frac{1}{25}c^2 - \frac{9}{4}d^2 \\
(4a - 3b)(4a + 3b) & \\
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\begin{aligned}
(x - 8y)(x + 8y) &= x^2 - 64y^2 \\
(3a - 2b)(3a + 2b) &= 9a^2 - 4b^2 \\
\left(\frac{2}{3}a + \frac{1}{2}b\right)\left(\frac{2}{3}a - \frac{1}{2}b\right) &= \frac{4}{9}a^2 - \frac{1}{4}b^2 \\
(7a - 1)(7a + 1) &= 49a^2 - 1 \\
(2x - 5y)(2x + 5y) &= 4x^2 - 25y^2 \\
\left(\frac{1}{5}c - \frac{3}{2}d\right)\left(\frac{1}{5}c + \frac{3}{2}d\right) &= \frac{1}{25}c^2 - \frac{9}{4}d^2 \\
(4a - 3b)(4a + 3b) &= 16a^2 - 9b^2 \\
(10a - 11b)(10a + 11b) \\
\left(\frac{2}{7}a - \frac{1}{3}b\right)\left(\frac{2}{7}c + \frac{1}{3}b\right) \\
(a^2b^2 - 2)(a^2b^2 + 2)
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(x - 8y)(x + 8y) &= x^2 - 64y^2 \\
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(7a - 1)(7a + 1) &= 49a^2 - 1 \\
(2x - 5y)(2x + 5y) &= 4x^2 - 25y^2 \\
(\tfrac{1}{5}c - \tfrac{3}{2}d)(\tfrac{1}{5}c + \tfrac{3}{2}d) &= \tfrac{1}{25}c^2 - \tfrac{9}{4}d^2 \\
(4a - 3b)(4a + 3b) &= 16a^2 - 9b^2 \\
(10a - 11b)(10a + 11b) &= 100a^2 - 121b^2 \\
(\tfrac{2}{7}a - \tfrac{1}{3}b)(\tfrac{2}{7}c + \tfrac{1}{3}b) & \\
(a^2b^2 - 2)(a^2b^2 + 2) &
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(7a - 1)(7a + 1) &= 49a^2 - 1 \\
(2x - 5y)(2x + 5y) &= 4x^2 - 25y^2 \\
(\tfrac{1}{5}c - \tfrac{3}{2}d)(\tfrac{1}{5}c + \tfrac{3}{2}d) &= \tfrac{1}{25}c^2 - \tfrac{9}{4}d^2 \\
(4a - 3b)(4a + 3b) &= 16a^2 - 9b^2 \\
(10a - 11b)(10a + 11b) &= 100a^2 - 121b^2 \\
(\tfrac{2}{7}a - \tfrac{1}{3}b)(\tfrac{2}{7}c + \tfrac{1}{3}b) &= \tfrac{4}{49}a^2 - \tfrac{1}{9}b^2 \\
(a^2b^2 - 2)(a^2b^2 + 2) &
\end{aligned}
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\begin{aligned}
(x - 8y)(x + 8y) &= x^2 - 64y^2 \\
(3a - 2b)(3a + 2b) &= 9a^2 - 4b^2 \\
\left(\frac{2}{3}a + \frac{1}{2}b\right)\left(\frac{2}{3}a - \frac{1}{2}b\right) &= \frac{4}{9}a^2 - \frac{1}{4}b^2 \\
(7a - 1)(7a + 1) &= 49a^2 - 1 \\
(2x - 5y)(2x + 5y) &= 4x^2 - 25y^2 \\
\left(\frac{1}{5}c - \frac{3}{2}d\right)\left(\frac{1}{5}c + \frac{3}{2}d\right) &= \frac{1}{25}c^2 - \frac{9}{4}d^2 \\
(4a - 3b)(4a + 3b) &= 16a^2 - 9b^2 \\
(10a - 11b)(10a + 11b) &= 100a^2 - 121b^2 \\
\left(\frac{2}{7}a - \frac{1}{3}b\right)\left(\frac{2}{7}c + \frac{1}{3}b\right) &= \frac{4}{49}a^2 - \frac{1}{9}b^2 \\
(a^2b^2 - 2)(a^2b^2 + 2) &= a^4b^4 - 4
\end{aligned}
$$