ALGEBRA 1 · CLASSWORK · ADVANCED

Factor ax2 + bx + c

SCORE / 25

01 Part A · Practice

To factor $ax^2 + bx + c$, find factors of a and c whose cross products add to b (or split bx using ac and group).

EXAMPLE

Factor $3x^2 - 10x + 8$.

1. $ac = 24$; $-6 + (-4) = -10$.
2. $3x^2 - 6x - 4x + 8 = 3x(x - 2) - 4(x - 2)$
3. $(3x - 4)(x - 2)$

1 ●○○ Factor. $25x^2 + 40x - 48$

2 ●○○ Factor completely. $20x^2 - 37xy + 8y^2$

3 ●○○ Factor. $15x^2 + 26x + 8$

4 ●○○ Factor completely. $12x^2 + 32xy + 21y^2$

5 ●○○ Factor. $16x^2 + 40x + 9$

6 ●○○ Factor. $9x^2 + 48x + 55$

7 ●○○ Factor completely. $10x^2 + 19xy + 6y^2$

8 ●○○ Factor. $6x^2 + 11x + 3$

9 ●○○ Factor. $12x^2 - 35x + 8$

10 ●○○ Factor. $15x^2 + 64x + 64$

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PREVIEW

Preview - the full worksheet and its answer key are at primeworksheet.com