

TASK

Fully factorise

e.g. $\sqrt{2} y - \sqrt{50} x$



$$= \underline{\sqrt{2}} (\underline{y - 5x})$$



(1)	$\sqrt{3} x + \sqrt{75}$
(2)	$\sqrt{98} + 4\sqrt{2} x$
(3)	$\sqrt{48} + \sqrt{12} x$
(4)	$\sqrt{32} y^2 + \sqrt{18} xy$

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Fully factorise

(5)	$\sqrt{15}x + \sqrt{10}y$
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(6)	$\sqrt{35}x^2 - \sqrt{28}x$
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(7)	$\sqrt{40}x + \sqrt{60}x^2y$
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(8)	$\sqrt{33}xy^2 - \sqrt{55}x^2y + \sqrt{11}xy$
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TASK

Fully factorise

e.g. $\sqrt{2} y - \sqrt{50} x$



$$= \underline{\sqrt{2}} (y - 5x)$$



(1)	$\sqrt{3} x + \sqrt{75}$ $\sqrt{3} (x + 5)$
(2)	$\sqrt{98} + 4\sqrt{2} x$ $\sqrt{2} (7 + 4x)$
(3)	$\sqrt{48} + \sqrt{12} x$ $= 4\sqrt{3} + 2\sqrt{3}x$ $= 2\sqrt{3}(2+x)$
(4)	$\sqrt{32} y^2 + \sqrt{18} xy$ $= 4\sqrt{2}y^2 + 3\sqrt{2}xy$ $= \sqrt{2}y(4y + 3x)$

TASK

Fully factorise

(5) $\sqrt{15}x + \sqrt{10}y$

$$\sqrt{3}\sqrt{5}x + \sqrt{2}\sqrt{5}y$$

$$= \sqrt{5}(\sqrt{3}x + \sqrt{2}y)$$

(6) $\sqrt{35}x^2 - \sqrt{28}x$

$$= \sqrt{7}\sqrt{5}x^2 - 2\sqrt{7}x$$

$$= \sqrt{7}x(\sqrt{5}x - 2)$$

(7) $\sqrt{40}x + \sqrt{60}x^2y$

$$= 2\sqrt{10}x + \sqrt{6}\sqrt{10}x^2y$$

$$= \sqrt{10}x(2 + \sqrt{6}xy)$$

(8) $\sqrt{33}xy^2 - \sqrt{55}x^2y + \sqrt{11}xy$

$$= \sqrt{11}xy(\sqrt{3}y - \sqrt{5}x + 1)$$