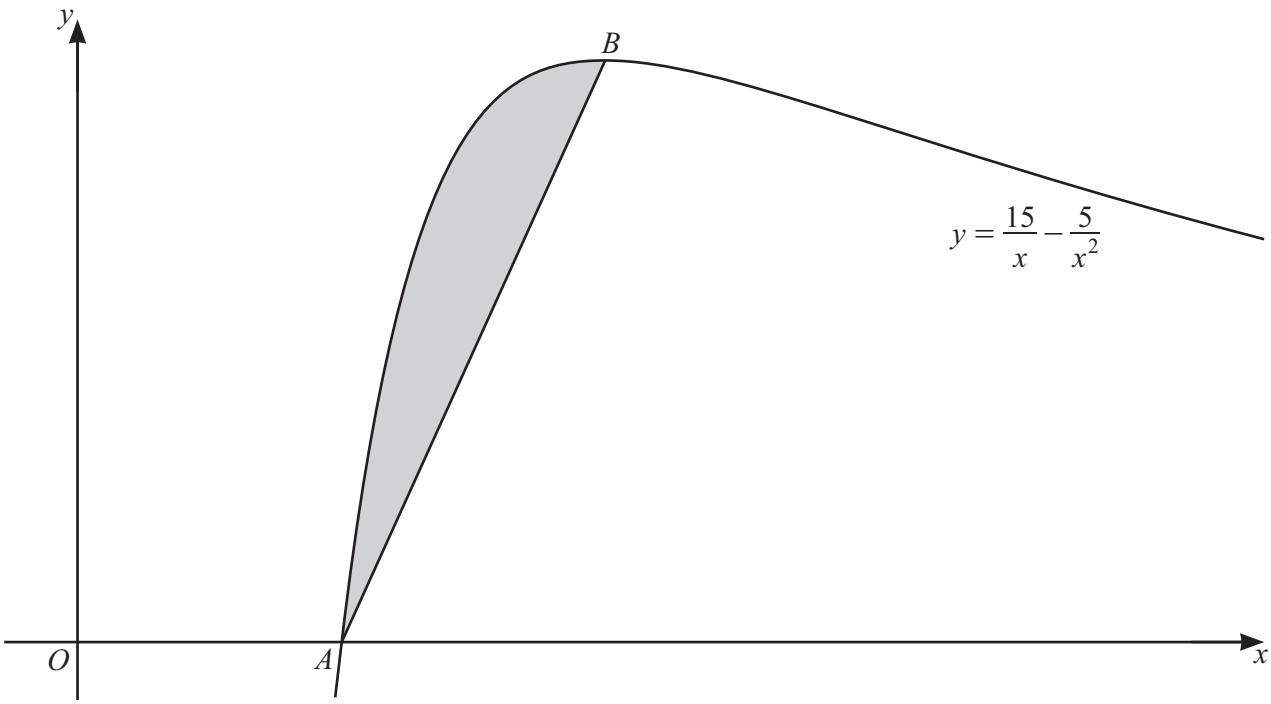
8



The diagram shows part of the curve $y = \frac{15}{x} - \frac{5}{x^2}$.

The curve meets the x-axis at the point A.
The curve has a maximum at the point B.

Find the area of the shaded region enclosed by the line AB and the curve.

Give your answer in exact form. [11]

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Continuation of working space for Question 8.

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9 **(a)** Solve the equation $3\sec 3x = \sqrt{3}\operatorname{cosec} 3x$ for $-120° \leqslant x \leqslant 120°$. [5]

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