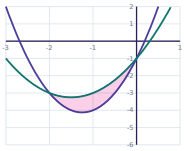
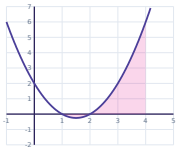
Area Under & Between Curves with Integrals · 1

Find the area of the region enclosed by $y = 2x^2 + 5x - 1$ and $y = x^2 + 3x - 1$.



Area Under & Between Curves with Integrals · 2

Find the total area between $y = x^2 - 3x + 2$ and the x-axis from $x = 1$ to $x = 4$.



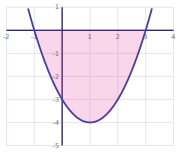
Area Under & Between Curves with Integrals · 3

Find the total area of the region enclosed by $y = 2x^3$ and $y = 2x$.



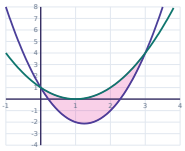
Area Under & Between Curves with Integrals · 4

Find the area of the region enclosed by $y = x^2 - 2x - 3$ and the x-axis.



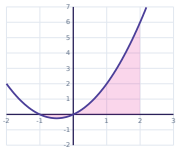
Area Under & Between Curves with Integrals · 5

Find the area of the region enclosed by $y = 2x^2 - 5x + 1$ and $y = x^2 - 2x + 1$.



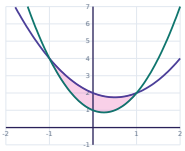
Area Under & Between Curves with Integrals · 6

Find the total area between $y = x^2 + x$ and the x-axis from $x = -1$ to $x = 2$.



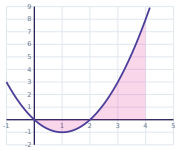
Area Under & Between Curves with Integrals · 7

Find the area of the region enclosed by $y = x^2 - x + 2$ and $y = 2x^2 - x + 1$.



Area Under & Between Curves with Integrals · 8

Find the total area between $y = x^2 - 2x$ and the x-axis from $x = 0$ to $x = 4$.



Area Under & Between Curves with Integrals · 2

ANSWER

$$\frac{29}{6}$$

Area Under & Between Curves with Integrals · 1

ANSWER

$$\frac{4}{3}$$

Area Under & Between Curves with Integrals · 4

ANSWER

$$\frac{32}{3}$$

Area Under & Between Curves with Integrals · 3

ANSWER

$$1$$

Area Under & Between Curves with Integrals · 6

ANSWER

$$\frac{29}{6}$$

Area Under & Between Curves with Integrals · 5

ANSWER

$$\frac{9}{2}$$

Area Under & Between Curves with Integrals · 8

ANSWER

$$8$$

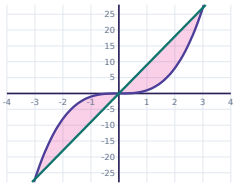
Area Under & Between Curves with Integrals · 7

ANSWER

$$\frac{4}{3}$$

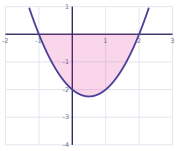
Area Under & Between Curves with Integrals · 9

Find the total area of the region enclosed by $y = x^3$ and $y = 9x$.



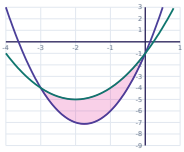
Area Under & Between Curves with Integrals · 10

Find the area of the region enclosed by $y = x^2 - x - 2$ and the x-axis.



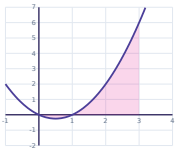
Area Under & Between Curves with Integrals · 11

Find the area of the region enclosed by $y = 2x^2 + 7x - 1$ and $y = x^2 + 4x - 1$.



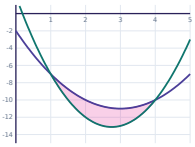
Area Under & Between Curves with Integrals · 12

Find the total area between $y = x^2 - x$ and the x-axis from $x = 0$ to $x = 3$.



Area Under & Between Curves with Integrals · 13

Find the area of the region enclosed by $y = x^2 - 6x - 2$ and $y = 2x^2 - 11x + 2$.



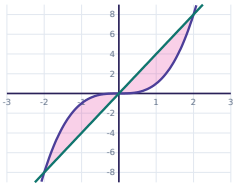
Area Under & Between Curves with Integrals · 14

Find the total area between $y = x^2 + x - 2$ and the x-axis from $x = -2$ to $x = 3$.



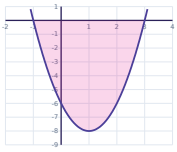
Area Under & Between Curves with Integrals · 15

Find the total area of the region enclosed by $y = x^3$ and $y = 4x$.



Area Under & Between Curves with Integrals · 16

Find the area of the region enclosed by $y = 2x^2 - 4x - 6$ and the x-axis.



Area Under & Between Curves with Integrals · 10

ANSWER

$$\frac{9}{2}$$

Area Under & Between Curves with Integrals · 9

ANSWER

$$\frac{81}{2}$$

Area Under & Between Curves with Integrals · 12

ANSWER

$$\frac{29}{6}$$

Area Under & Between Curves with Integrals · 11

ANSWER

$$\frac{9}{2}$$

Area Under & Between Curves with Integrals · 14

ANSWER

$$\frac{79}{6}$$

Area Under & Between Curves with Integrals · 13

ANSWER

$$\frac{9}{2}$$

Area Under & Between Curves with Integrals · 16

ANSWER

$$\frac{64}{3}$$

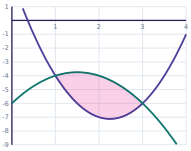
Area Under & Between Curves with Integrals · 15

ANSWER

$$8$$

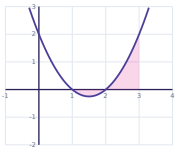
Area Under & Between Curves with Integrals · 17

Find the area of the region enclosed by $y = 2x^2 - 9x + 3$ and $y = -x^2 + 3x - 6$.



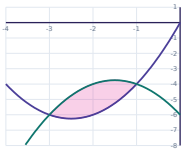
Area Under & Between Curves with Integrals · 18

Find the total area between $y = x^2 - 3x + 2$ and the x-axis from $x = 1$ to $x = 3$.



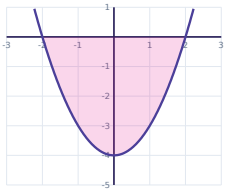
Area Under & Between Curves with Integrals · 19

Find the area of the region enclosed by $y = x^2 + 5x$ and $y = -x^2 - 3x - 6$.



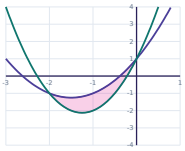
Area Under & Between Curves with Integrals · 20

Find the area of the region enclosed by $y = x^2 - 4$ and the x-axis.



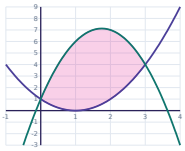
Area Under & Between Curves with Integrals · 21

Find the area of the region enclosed by $y = x^2 + 3x + 1$ and $y = 2x^2 + 5x + 1$.



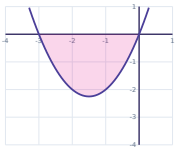
Area Under & Between Curves with Integrals · 22

Find the area of the region enclosed by $y = x^2 - 2x + 1$ and $y = -2x^2 + 7x + 1$.



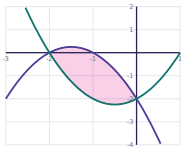
Area Under & Between Curves with Integrals · 23

Find the area of the region enclosed by $y = x^2 + 3x$ and the x-axis.



Area Under & Between Curves with Integrals · 24

Find the area of the region enclosed by $y = -x^2 - 3x - 2$ and $y = x^2 + x - 2$.



Area Under & Between Curves with Integrals · 18

ANSWER

$$1$$

Area Under & Between Curves with Integrals · 17

ANSWER

$$4$$

Area Under & Between Curves with Integrals · 20

ANSWER

$$\frac{32}{3}$$

Area Under & Between Curves with Integrals · 19

ANSWER

$$\frac{8}{3}$$

Area Under & Between Curves with Integrals · 22

ANSWER

$$\frac{27}{2}$$

Area Under & Between Curves with Integrals · 21

ANSWER

$$\frac{4}{3}$$

Area Under & Between Curves with Integrals · 24

ANSWER

$$\frac{8}{3}$$

Area Under & Between Curves with Integrals · 23

ANSWER

$$\frac{9}{2}$$