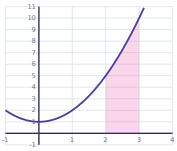
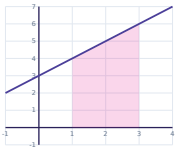
Area Under & Between Curves with Integrals · 1

Find the area of the shaded region under $y = x^2 + 1$ from $x = 2$ to $x = 3$.



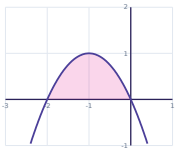
Area Under & Between Curves with Integrals · 2

Find the area of the shaded region under $y = x + 3$ from $x = 1$ to $x = 3$.



Area Under & Between Curves with Integrals · 3

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



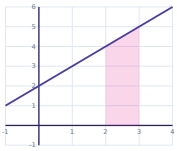
Area Under & Between Curves with Integrals · 4

Find the area of the shaded region under $y = x^2 + 3$ from $x = 0$ to $x = 2$.



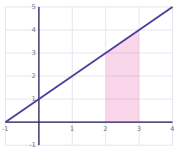
Area Under & Between Curves with Integrals · 5

Find the area of the shaded region under $y = x + 2$ from $x = 2$ to $x = 3$.



Area Under & Between Curves with Integrals · 6

Find the area of the shaded region under $y = x + 1$ from $x = 2$ to $x = 3$.



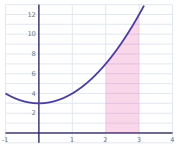
Area Under & Between Curves with Integrals · 7

Find the area of the shaded region under $y = 2x^2$ from $x = 2$ to $x = 4$.



Area Under & Between Curves with Integrals · 8

Find the area of the shaded region under $y = x^2 + 3$ from $x = 2$ to $x = 3$.



Area Under & Between Curves with Integrals · 2

ANSWER

$$10$$

Area Under & Between Curves with Integrals · 1

ANSWER

$$\frac{22}{3}$$

Area Under & Between Curves with Integrals · 4

ANSWER

$$\frac{26}{3}$$

Area Under & Between Curves with Integrals · 3

ANSWER

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

Area Under & Between Curves with Integrals · 6

ANSWER

$$\frac{7}{2}$$

Area Under & Between Curves with Integrals · 5

ANSWER

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

Area Under & Between Curves with Integrals · 8

ANSWER

$$\frac{28}{3}$$

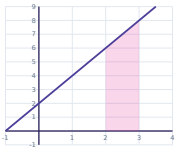
Area Under & Between Curves with Integrals · 7

ANSWER

$$\frac{112}{3}$$

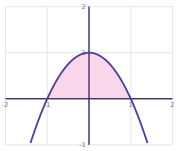
Area Under & Between Curves with Integrals · 9

Find the area of the shaded region under y = 2x + 2 from x = 2 to x = 3.



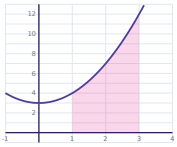
Area Under & Between Curves with Integrals · 10

Find the area of the region enclosed by y = -x² + 1 and the x-axis.



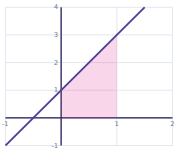
Area Under & Between Curves with Integrals · 11

Find the area of the shaded region under y = x² + 3 from x = 1 to x = 3.



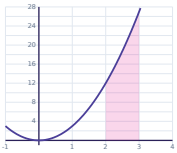
Area Under & Between Curves with Integrals · 12

Find the area of the shaded region under y = 2x + 1 from x = 0 to x = 1.



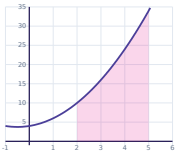
Area Under & Between Curves with Integrals · 13

Find the area of the shaded region under y = 3x² from x = 2 to x = 3.



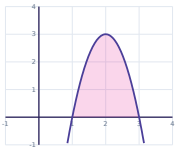
Area Under & Between Curves with Integrals · 14

Find the area of the shaded region under y = x² + x + 4 from x = 2 to x = 5.



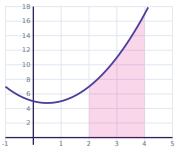
Area Under & Between Curves with Integrals · 15

Find the area of the region enclosed by y = -3x² + 12x - 9 and the x-axis.



Area Under & Between Curves with Integrals · 16

Find the area of the shaded region under y = x² - x + 5 from x = 2 to x = 4.



Area Under & Between Curves with Integrals · 10

ANSWER

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

Area Under & Between Curves with Integrals · 9

ANSWER

$$7$$

Area Under & Between Curves with Integrals · 12

ANSWER

$$2$$

Area Under & Between Curves with Integrals · 11

ANSWER

$$\frac{44}{3}$$

Area Under & Between Curves with Integrals · 14

ANSWER

$$\frac{123}{2}$$

Area Under & Between Curves with Integrals · 13

ANSWER

$$19$$

Area Under & Between Curves with Integrals · 16

ANSWER

$$\frac{68}{3}$$

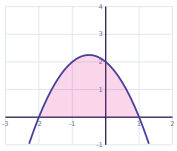
Area Under & Between Curves with Integrals · 15

ANSWER

$$4$$

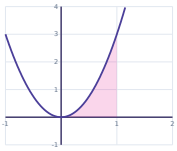
Area Under & Between Curves with Integrals · 17

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



Area Under & Between Curves with Integrals · 18

Find the area of the shaded region under $y = 3x^2$ from $x = 0$ to $x = 1$.



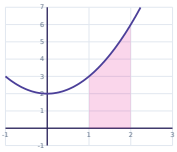
Area Under & Between Curves with Integrals · 19

Find the area of the shaded region under $y = 3x^2$ from $x = 0$ to $x = 2$.



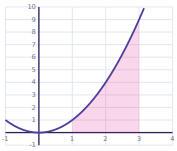
Area Under & Between Curves with Integrals · 20

Find the area of the shaded region under $y = x^2 + 2$ from $x = 1$ to $x = 2$.



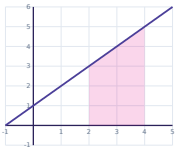
Area Under & Between Curves with Integrals · 21

Find the area of the shaded region under $y = x^2$ from $x = 1$ to $x = 3$.



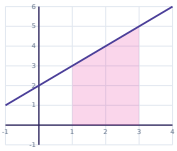
Area Under & Between Curves with Integrals · 22

Find the area of the shaded region under $y = x + 1$ from $x = 2$ to $x = 4$.



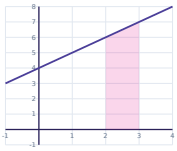
Area Under & Between Curves with Integrals · 23

Find the area of the shaded region under $y = x + 2$ from $x = 1$ to $x = 3$.



Area Under & Between Curves with Integrals · 24

Find the area of the shaded region under $y = x + 4$ from $x = 2$ to $x = 3$.



Area Under & Between Curves with Integrals · 18

ANSWER

$$1$$

Area Under & Between Curves with Integrals · 17

ANSWER

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

Area Under & Between Curves with Integrals · 20

ANSWER

$$\frac{13}{3}$$

Area Under & Between Curves with Integrals · 19

ANSWER

$$8$$

Area Under & Between Curves with Integrals · 22

ANSWER

$$8$$

Area Under & Between Curves with Integrals · 21

ANSWER

$$\frac{26}{3}$$

Area Under & Between Curves with Integrals · 24

ANSWER

$$\frac{13}{2}$$

Area Under & Between Curves with Integrals · 23

ANSWER

$$8$$