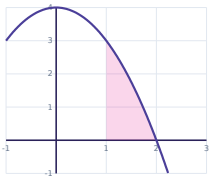
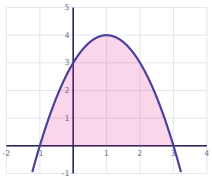
Task card 1 Area Under & Between Curves with I...

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



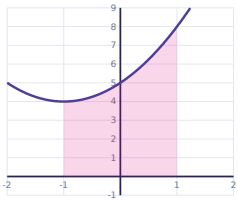
Task card 2 Area Under & Between Curves with I...

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



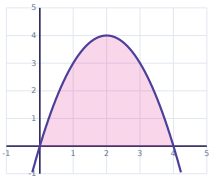
Task card 3 Area Under & Between Curves with I...

Find the area of the shaded region under $y = x^2 + 2x + 5$ from $x = -1$ to $x = 1$.



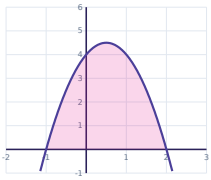
Task card 4 Area Under & Between Curves with I...

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



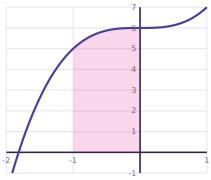
Task card 5 Area Under & Between Curves with I...

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



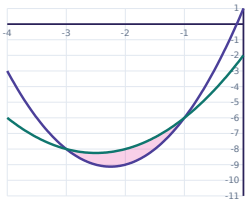
Task card 6 Area Under & Between Curves with I...

Find the area of the shaded region under $y = x^3 + 6$ from $x = -1$ to $x = 0$.



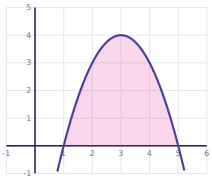
Task card 7 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = 2x^2 + 9x + 1$ and $y = x^2 + 5x - 2$.



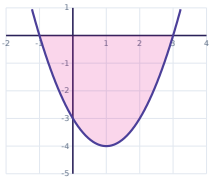
Task card 8 Area Under & Between Curves with I...

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



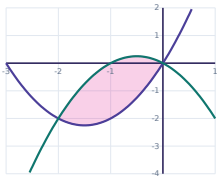
Task card 9 Area Under & Between Curves with I...

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



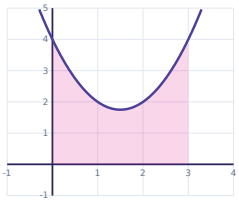
Task card 10 Area Under & Between Curves with I...

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



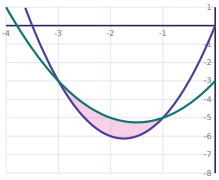
Task card 11 Area Under & Between Curves with I...

Find the area of the shaded region under $y = x^2 - 3x + 4$ from $x = 0$ to $x = 3$.



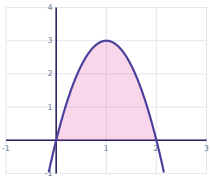
Task card 12 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = 2x^2 + 7x$ and $y = x^2 + 3x - 3$.



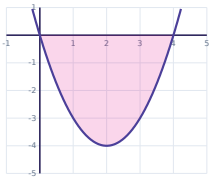
Task card 13 Area Under & Between Curves with I...

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



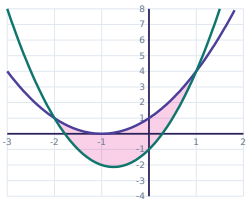
Task card 14 Area Under & Between Curves with I...

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



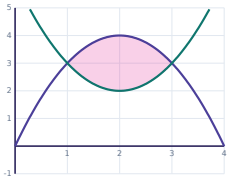
Task card 15 Area Under & Between Curves with I...

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



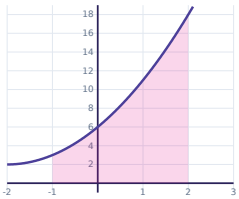
Task card 16 Area Under & Between Curves with I...

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



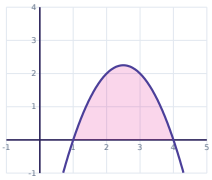
Task card 17 Area Under & Between Curves with I...

Find the area of the shaded region under $y = x^2 + 4x + 6$ from $x = -1$ to $x = 2$.



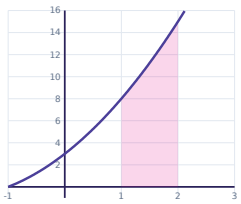
Task card 18 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = -x^2 + 5x - 4$ and the x-axis.



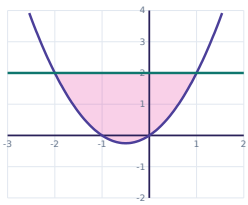
Task card 19 Area Under & Between Curves with I...

Find the area of the shaded region under $y = x^2 + 4x + 3$ from $x = 1$ to $x = 2$.



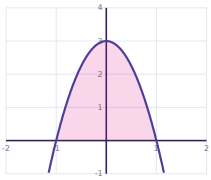
Task card 20 Area Under & Between Curves with I...

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



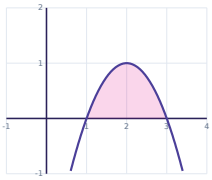
Task card 21 Area Under & Between Curves with I...

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



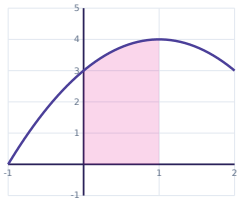
Task card 22 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = -x^2 + 4x - 3$ and the x-axis.



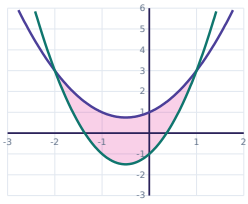
Task card 23 Area Under & Between Curves with I...

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



Task card 24 Area Under & Between Curves with I...

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



Area Under & Between Curves with Integrals Task Cards

Recording sheet · Grade 12 · Find each area. Give an exact answer: a whole number or a fraction in simplest form. An area is never negative.

Scan to check your answers

Name: _____ Date: _____

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Area Under & Between Curves with Integrals Task Cards: Answer Key

Grade 12 · Medium

The answers online

1. $\frac{5}{3}$	**2.** $\frac{32}{3}$	**3.** $\frac{32}{3}$
4. $\frac{32}{3}$	**5.** 9	**6.** $\frac{23}{4}$
7. $\frac{4}{3}$	**8.** $\frac{32}{3}$	**9.** $\frac{32}{3}$
10. $\frac{8}{3}$	**11.** $\frac{15}{2}$	**12.** $\frac{4}{3}$
13. 4	**14.** $\frac{32}{3}$	**15.** $\frac{9}{2}$
16. $\frac{8}{3}$	**17.** 27	**18.** $\frac{9}{2}$
19. $\frac{34}{3}$	**20.** $\frac{9}{2}$	**21.** 4
22. $\frac{4}{3}$	**23.** $\frac{11}{3}$	**24.** $\frac{9}{2}$