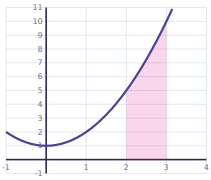
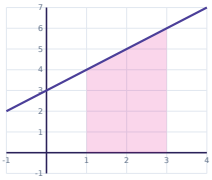
Task card 1 Area Under & Between Curves with I...

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



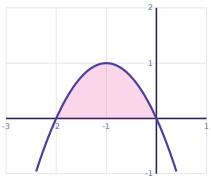
Task card 2 Area Under & Between Curves with I...

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



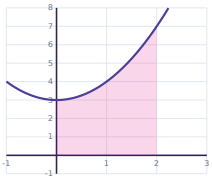
Task card 3 Area Under & Between Curves with I...

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



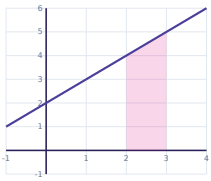
Task card 4 Area Under & Between Curves with I...

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



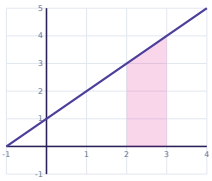
Task card 5 Area Under & Between Curves with I...

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



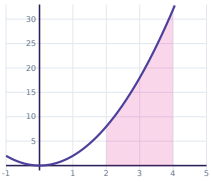
Task card 6 Area Under & Between Curves with I...

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



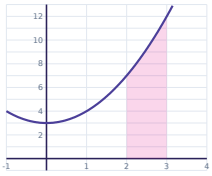
Task card 7 Area Under & Between Curves with I...

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



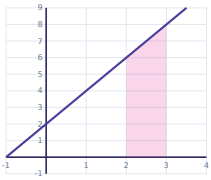
Task card 8 Area Under & Between Curves with I...

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



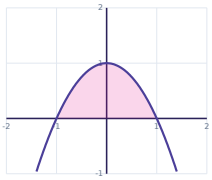
Task card 9 Area Under & Between Curves with I...

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



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

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



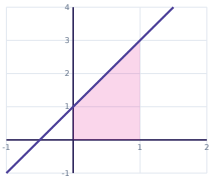
Task card 11 Area Under & Between Curves with I...

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



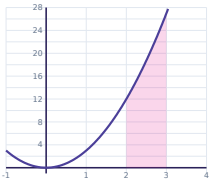
Task card 12 Area Under & Between Curves with I...

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



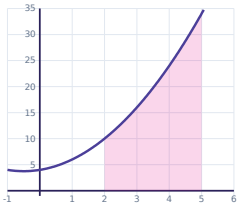
Task card 13 Area Under & Between Curves with I...

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



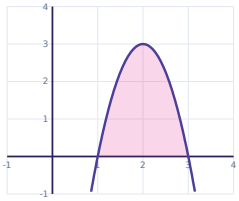
Task card 14 Area Under & Between Curves with I...

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



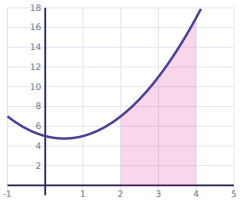
Task card 15 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = -3x^2 + 12x - 9$ and the x-axis.



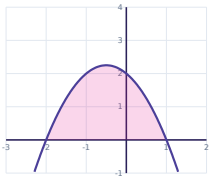
Task card 16 Area Under & Between Curves with I...

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



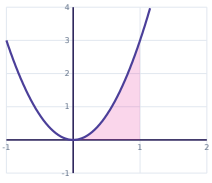
Task card 17 Area Under & Between Curves with I...

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



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

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



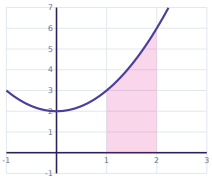
Task card 19 Area Under & Between Curves with I...

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



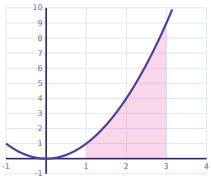
Task card 20 Area Under & Between Curves with I...

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



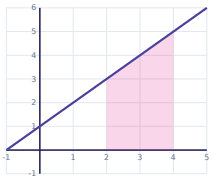
Task card 21 Area Under & Between Curves with I...

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



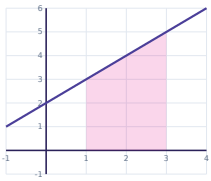
Task card 22 Area Under & Between Curves with I...

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



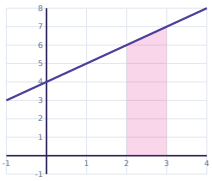
Task card 23 Area Under & Between Curves with I...

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



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

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



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 · Easy

The answers online

1. $\frac{22}{3}$	**2.** 10	**3.** $\frac{4}{3}$
4. $\frac{26}{3}$	**5.** $\frac{9}{2}$	**6.** $\frac{7}{2}$
7. $\frac{112}{3}$	**8.** $\frac{28}{3}$	**9.** 7
10. $\frac{4}{3}$	**11.** $\frac{44}{3}$	**12.** 2
13. 19	**14.** $\frac{123}{2}$	**15.** 4
16. $\frac{68}{3}$	**17.** $\frac{9}{2}$	**18.** 1
19. 8	**20.** $\frac{13}{3}$	**21.** $\frac{26}{3}$
22. 8	**23.** 8	**24.** $\frac{13}{2}$