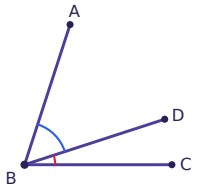
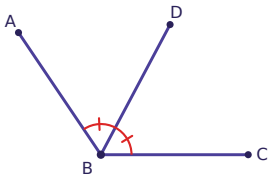
Task card 1 Angle Addition & Angle Bisectors

$m\angle ABD = (7x - 2)°$, $m\angle DBC = (2x + 2)°$, and $m\angle ABC = 72°$. Find $m\angle ABD$.



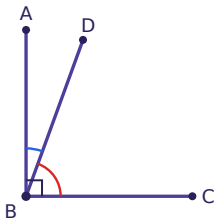
Task card 2 Angle Addition & Angle Bisectors

BD bisects $\angle ABC$. $m\angle ABD = (5x + 7)°$ and $m\angle DBC = (6x - 4)°$. Find $m\angle ABC$.



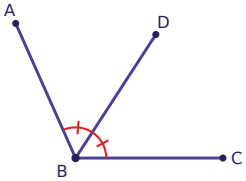
Task card 3 Angle Addition & Angle Bisectors

$m\angle ABD = (2x - 6)°$, $m\angle DBC = (5x + 5)°$, and $\angle ABC$ is a right angle. Find $m\angle DBC$.



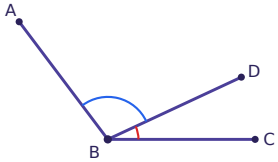
Task card 4 Angle Addition & Angle Bisectors

BD bisects $\angle ABC$. $m\angle ABD = (4x + 45)°$ and $m\angle DBC = (5x + 42)°$. Find $m\angle ABC$.



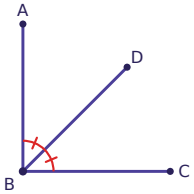
Task card 5 Angle Addition & Angle Bisectors

$m\angle ABD = (5x + 27)°$, $m\angle DBC = (3x - 20)°$, and $m\angle ABC = 127°$. Find $m\angle ABD$.



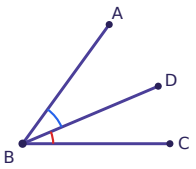
Task card 6 Angle Addition & Angle Bisectors

BD bisects $\angle ABC$. $m\angle ABD = (6x - 15)°$ and $m\angle ABC = (5x + 40)°$. Find $m\angle DBC$.



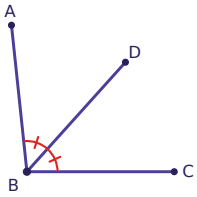
Task card 7 Angle Addition & Angle Bisectors

$m\angle ABD = (x + 18)°$, $m\angle DBC = (4x - 29)°$, and $m\angle ABC = 54°$. Find $m\angle DBC$.



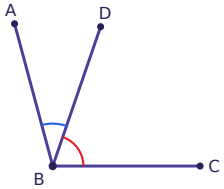
Task card 8 Angle Addition & Angle Bisectors

BD bisects $\angle ABC$. $m\angle ABD = (4x + 36)°$ and $m\angle DBC = (x + 45)°$. Find $m\angle ABC$.



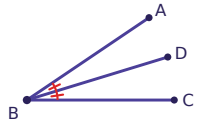
Task card 9 Angle Addition & Angle Bisectors

$m\angle ABD = (4x - 10)°$, $m\angle DBC = (5x + 16)°$, and $m\angle ABC = 105°$. Find $m\angle DBC$.



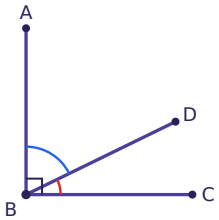
Task card 10 Angle Addition & Angle Bisectors

BD bisects $\angle ABC$. $m\angle ABD = (x + 10)°$ and $m\angle DBC = (4x - 11)°$. Find $m\angle ABC$.



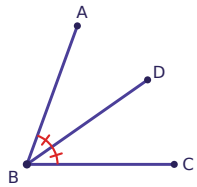
Task card 11 Angle Addition & Angle Bisectors

$m\angle ABD = (5x + 24)°$, $m\angle DBC = (5x - 14)°$, and $\angle ABC$ is a right angle. Find $m\angle DBC$.



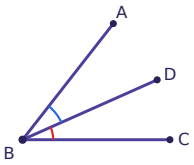
Task card 12 Angle Addition & Angle Bisectors

BD bisects $\angle ABC$. $m\angle ABD = (2x + 23)°$ and $m\angle ABC = (6x + 34)°$. Find $m\angle DBC$.



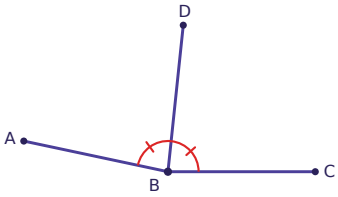
Task card 13 Angle Addition & Angle Bisectors

$m\angle ABD = (x + 24)°$, $m\angle DBC = (7x - 4)°$, and $m\angle ABC = 52°$. Find $m\angle ABD$.



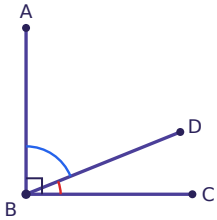
Task card 14 Angle Addition & Angle Bisectors

BD bisects $\angle ABC$. $m\angle ABD = (5x + 59)°$ and $m\angle DBC = (9x + 39)°$. Find $m\angle ABC$.



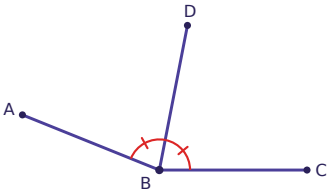
Task card 15 Angle Addition & Angle Bisectors

$m\angle ABD = (2x + 40)°$, $m\angle DBC = (x + 8)°$, and $\angle ABC$ is a right angle. Find $m\angle ABD$.



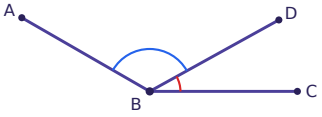
Task card 16 Angle Addition & Angle Bisectors

BD bisects $\angle ABC$. $m\angle ABD = (6x + 55)°$ and $m\angle ABC = (17x + 90)°$. Find $m\angle DBC$.



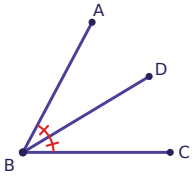
Task card 17 Angle Addition & Angle Bisectors

$m\angle ABD = (12x + 1)°$, $m\angle DBC = (4x - 11)°$, and $m\angle ABC = 150°$. Find $m\angle ABD$.



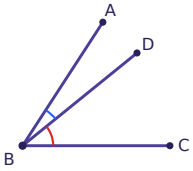
Task card 18 Angle Addition & Angle Bisectors

BD bisects $\angle ABC$. $m\angle ABD = (x + 22)°$ and $m\angle ABC = (7x - 1)°$. Find $m\angle DBC$.



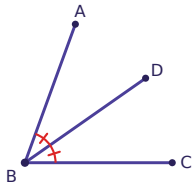
Task card 19 Angle Addition & Angle Bisectors

m∠ABD = (3x - 24)°, m∠DBC = (4x - 17)°, and m∠ABC = 57°. Find m∠DBC.



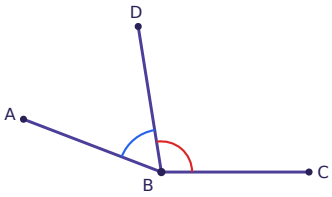
Task card 20 Angle Addition & Angle Bisectors

BD bisects ∠ABC. m∠ABD = (2x + 27)° and m∠DBC = (5x + 15)°. Find m∠ABC.



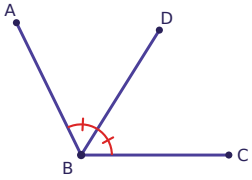
Task card 21 Angle Addition & Angle Bisectors

m∠ABD = 6x°, m∠DBC = (6x + 39)°, and m∠ABC = 159°. Find m∠DBC.



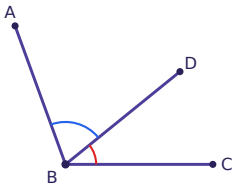
Task card 22 Angle Addition & Angle Bisectors

BD bisects ∠ABC. m∠ABD = (6x - 26)° and m∠ABC = (7x + 18)°. Find m∠DBC.



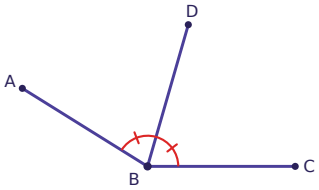
Task card 23 Angle Addition & Angle Bisectors

m∠ABD = (4x + 31)°, m∠DBC = (5x - 11)°, and m∠ABC = 110°. Find m∠ABD.



Task card 24 Angle Addition & Angle Bisectors

BD bisects ∠ABC. m∠ABD = (5x + 4)° and m∠ABC = (12x - 20)°. Find m∠DBC.



Angle Addition & Angle Bisectors Task Cards

Recording sheet · Grade 10 · Point D is in the interior of ∠ABC. Use the given information to answer each question.

Name: _____ Date: _____

Scan to check your answers

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

Angle Addition & Angle Bisectors Task Cards: Answer Key

Grade 10 · Hard

The answers online

1. 54°	**2.** 124°	**3.** 70°
4. 114°	**5.** 102°	**6.** 45°
7. 23°	**8.** 96°	**9.** 71°
10. 34°	**11.** 26°	**12.** 35°
13. 28°	**14.** 168°	**15.** 68°
16. 79°	**17.** 121°	**18.** 31°
19. 39°	**20.** 70°	**21.** 99°
22. 58°	**23.** 71°	**24.** 74°