Task card 1 Vectors in 3D: Dot & Cross Product...

Find the magnitude of v = <2, 4, 4>.

Task card 2 Vectors in 3D: Dot & Cross Product...

u = <-4, -3, 1> and v = <-3, 3, 4>. Find u · v.

Task card 3 Vectors in 3D: Dot & Cross Product...

u = <6, -5, 3> and v = <6, 6, -5>. Find 2u + v.

Task card 4 Vectors in 3D: Dot & Cross Product...

u = <-1, 0, -1> and v = <0, -1, -1>. Find u × v.

Task card 5 Vectors in 3D: Dot & Cross Product...

u = <2, 0, -1> and v = <-1, -1, -3>. Find u · v.

Task card 6 Vectors in 3D: Dot & Cross Product...

Find the magnitude of v = <2, 6, 9>.

Task card 7 Vectors in 3D: Dot & Cross Product...

Find the magnitude of v = <2, 9, 6>.

Task card 8 Vectors in 3D: Dot & Cross Product...

u = <-4, -2, -1> and v = <-4, -4, 3>. Find u · v.

Task card 9 Vectors in 3D: Dot & Cross Product...

Find the magnitude of v = <-4, 2, 4>.

Task card 10 Vectors in 3D: Dot & Cross Product...

u = <-3, 4, 1> and v = <-5, 1, 2>. Find u · v.

Task card 11 Vectors in 3D: Dot & Cross Product...

u = <4, 3, -3> and v = <-4, 0, 1>. Find 2u - 2v.

Task card 12 Vectors in 3D: Dot & Cross Product...

u = <0, 3, 1> and v = <0, 4, -4>. Find u × v.

Task card 13 Vectors in 3D: Dot & Cross Product...

$u = \langle -4, -2, -1 \rangle$ and $v = \langle 3, -1, -1 \rangle$. Find $u \cdot v$.

Task card 14 Vectors in 3D: Dot & Cross Product...

Find the magnitude of $v = \langle 2, -1, 2 \rangle$.

Task card 15 Vectors in 3D: Dot & Cross Product...

Find the magnitude of $v = \langle 6, 2, 9 \rangle$.

Task card 16 Vectors in 3D: Dot & Cross Product...

$u = \langle 0, 2, -4 \rangle$ and $v = \langle 1, -3, 1 \rangle$. Find $u \cdot v$.

Task card 17 Vectors in 3D: Dot & Cross Product...

$u = \langle 6, 2, -4 \rangle$ and $v = \langle -1, -4, 2 \rangle$. Find $u \cdot v$.

Task card 18 Vectors in 3D: Dot & Cross Product...

$u = \langle 0, 1, 3 \rangle$ and $v = \langle 3, 2, -2 \rangle$. Find $u \times v$.

Task card 19 Vectors in 3D: Dot & Cross Product...

Find the magnitude of v = <10, 11, -2>.

Task card 20 Vectors in 3D: Dot & Cross Product...

Are u = <-2, 0, -3> and v = <0, -2, 2> perpendicular? Write yes or no.

Task card 21 Vectors in 3D: Dot & Cross Product...

u = <2, 1, 6> and v = <1, -2, -5>. Find 4u + 3v.

Task card 22 Vectors in 3D: Dot & Cross Product...

u = <4, 4, 0> and v = <0, 5, -2>. Find u × v.

Task card 23 Vectors in 3D: Dot & Cross Product...

Find the distance between the points P(-4, 3, 1) and Q(-1, -9, 5).

Task card 24 Vectors in 3D: Dot & Cross Product...

u = <-5, -1, 4> and v = <-2, -1, 6>. Find u · v.

Vectors in 3D: Dot & Cross Products Task Cards

Recording sheet · Grade 12 · Give exact answers. Write vectors as <a, b, c>.

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

Vectors in 3D: Dot & Cross Products Task Cards: Answer Key

Grade 12 · Easy

The answers online

1. 6	**2.** 7	**3.** <18, -4, 1>
4. <-1, -1, 1>	**5.** 1	**6.** 11
7. 11	**8.** 21	**9.** 6
10. 21	**11.** <16, 6, -8>	**12.** <-16, 0, 0>
13. -9	**14.** 3	**15.** 11
16. -10	**17.** -22	**18.** <-8, 9, -3>
19. 15	**20.** no	**21.** <11, -2, 9>
22. <-8, 8, 20>	**23.** 13	**24.** 35