

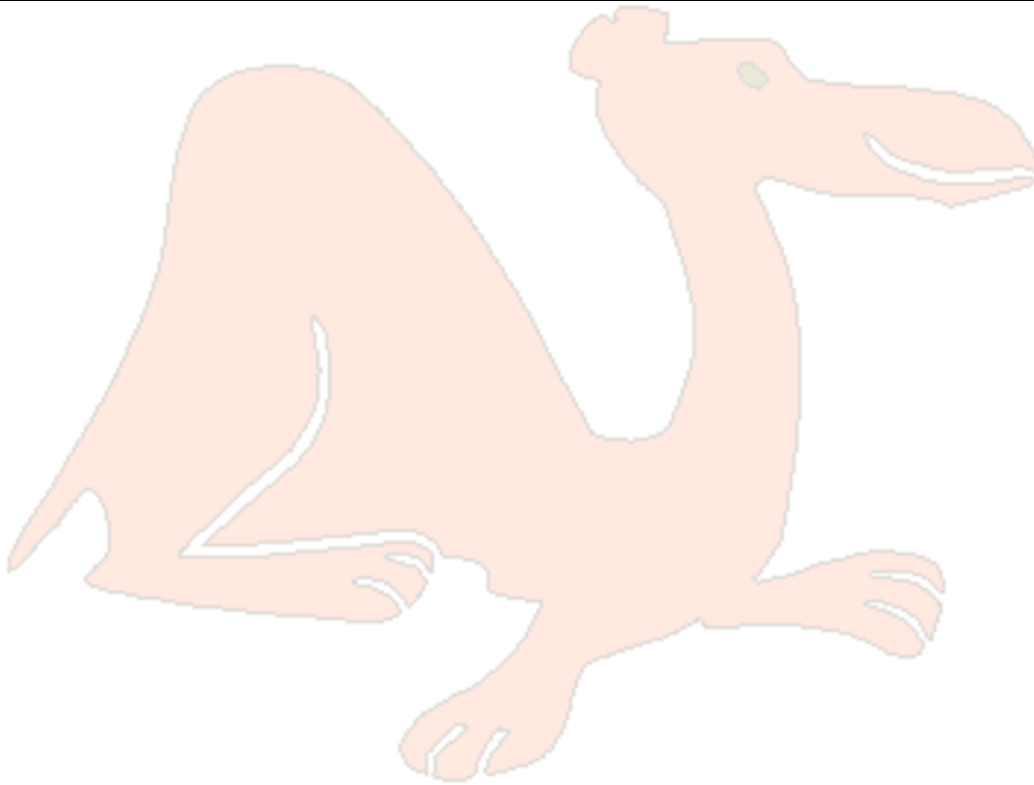


CAMI Wiskunde: Graad 10

GRAAD 10_KABV Kurrikulum

10.8 Kolineêre punte

1. Bepaal of die punte $D(6;4)$, $E(2;1)$ en $F(3;5)$ kolineêr is.
2. Bepaal of die punte $A(5;7)$, $B(7;1)$ en $C(2;2)$ kolineêr is.
3. Bepaal of die punte $U(5;1)$, $V(7;1)$ en $W(5;8)$ kolineêr is.
4. Indien $T(5;9)$, $U(7;7)$ en $V(12;a)$ kolineêr is, bereken die waarde van a .
5. Indien $C(a;1)$, $D(4;4)$ en $E(6;6)$ kolineêr is, bereken die waarde van a .





MEMO [8.7.7]

1.

$$m_{DE} = \frac{1-4}{2-9}$$

$$m_{DE} = \frac{-3}{-7}$$

$$m_{DE} = \frac{3}{7}$$

$$m_{EF} = \frac{5-1}{3-2}$$

$$m_{EF} = \frac{4}{1}$$

$$m_{EF} = 4$$

$$m_{DE} \neq m_{EF}$$

D, E en F nie-kolineêr.

2.

$$m_{AB} = \frac{1-7}{7-5}$$

$$m_{AB} = -3$$

$$m_{BC} = \frac{2-1}{2-7}$$

$$m_{BC} = \frac{1}{-5}$$

$$m_{AB} \neq m_{BC}$$

A, B en C nie-kolineêr.

3.

$$m_{UV} = \frac{1-1}{7-5}$$

$$m_{UV} = 0$$

$$m_{VW} = \frac{8-1}{5-7}$$

$$m_{VW} = \frac{7}{-2}$$

$$m_{UV} \neq m_{VW}$$

U, V en W nie-kolineêr.

4.

$$m_{TU} = \frac{7-9}{7-5} = -1 \quad \text{en} \quad m_{UV} = \frac{a-7}{12-7} = \frac{a-7}{5}$$



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$$-1 = \frac{a-7}{5}$$

$$-5 = a-7$$

$$a = 2$$

5.

$$m_{DE} = \frac{6-4}{6-4} = 1$$

en

$$m_{CD} = \frac{4-1}{4-a} = \frac{3}{4-a}$$

$$1 = \frac{3}{4-a}$$

$$3 = 4-a$$

$$a = 1$$

