CYCLOIDS

EXERCISES

DIVIDERS

COMPASS

CYCLOID

CIRCLE

BASE LINE

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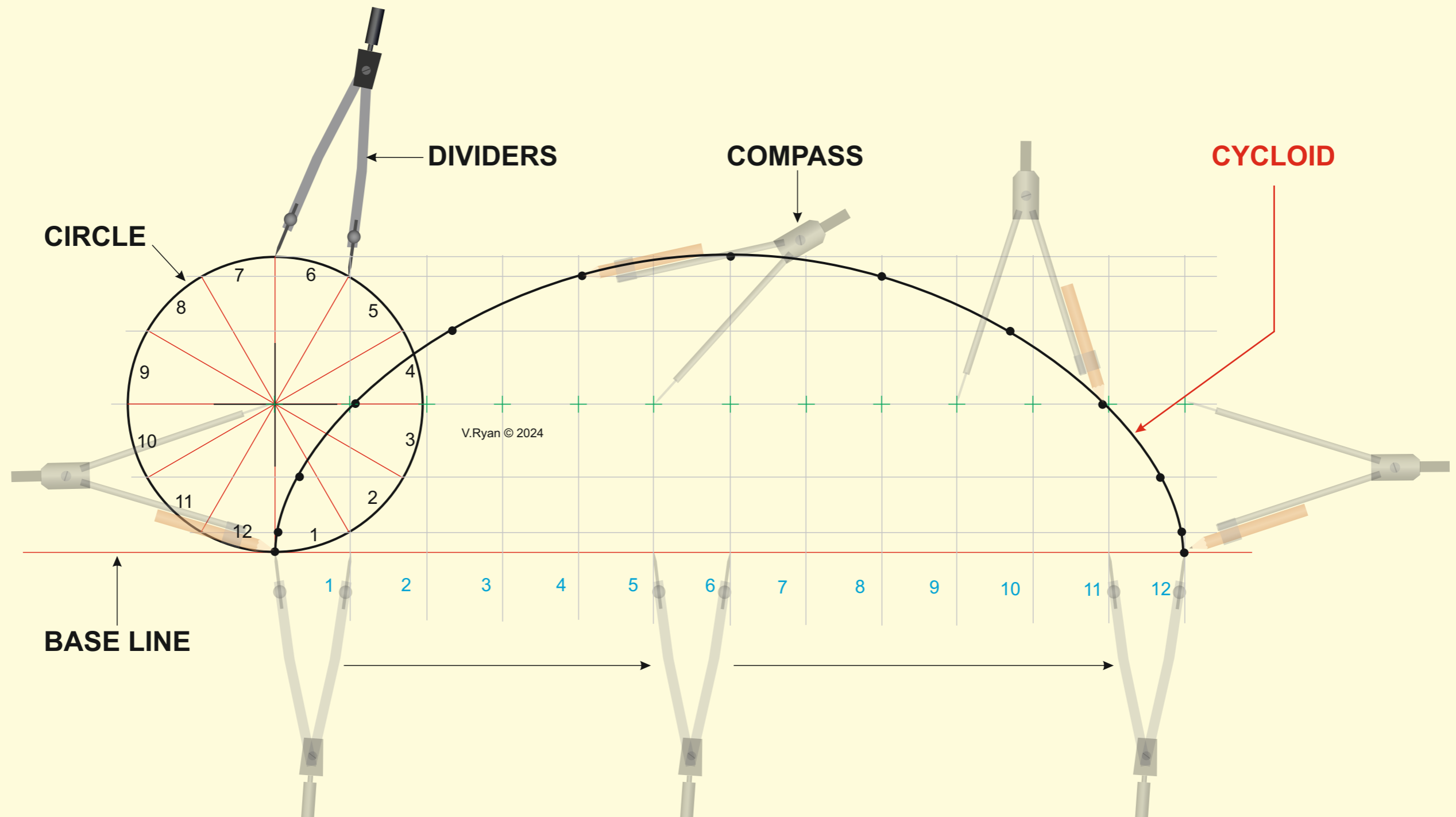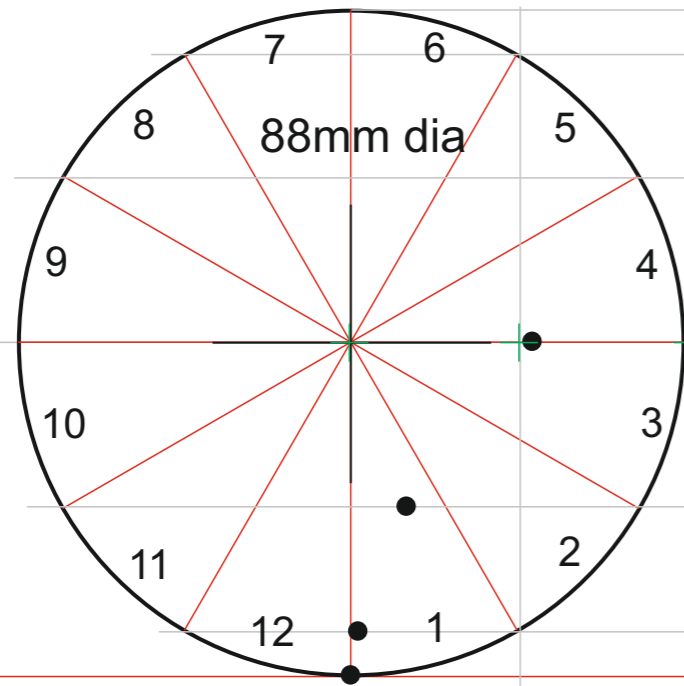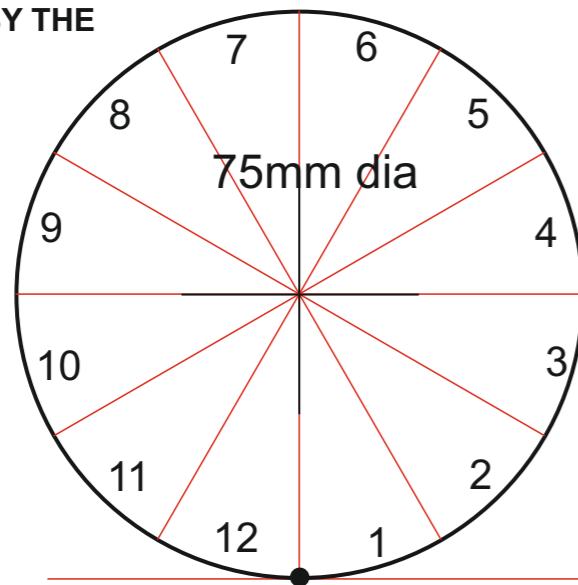# CYCLOIDS

QUESTION

THE CIRCLE BELOW ROLLS ALONG A SURFACE FOR THE DISTANCE OF ONE REVOLUTION. COMPLETE THE CYCLOID BY ADDING THE REMAINING 'POINTS' AND DRAWING ITS CURVE.

88mm dia

7 6 8 5 9 4 10 3 11 2 12 1

1 2 3 4 5 6 7 8 9 10 11 12

QUESTION

THE CIRCUMFERENCE OF THIS CIRCLE HAS A POINT MARKED ON IT AS A DOT. DRAW THE CYCLOID (CURVE) PRODUCED AS THE CIRCLE ROLLS IN THE DIRECTION INDICATED BY THE ARROW.

75mm dia

7 6 8 5 9 4 10 3 11 2 12 1

HELPFUL LINK
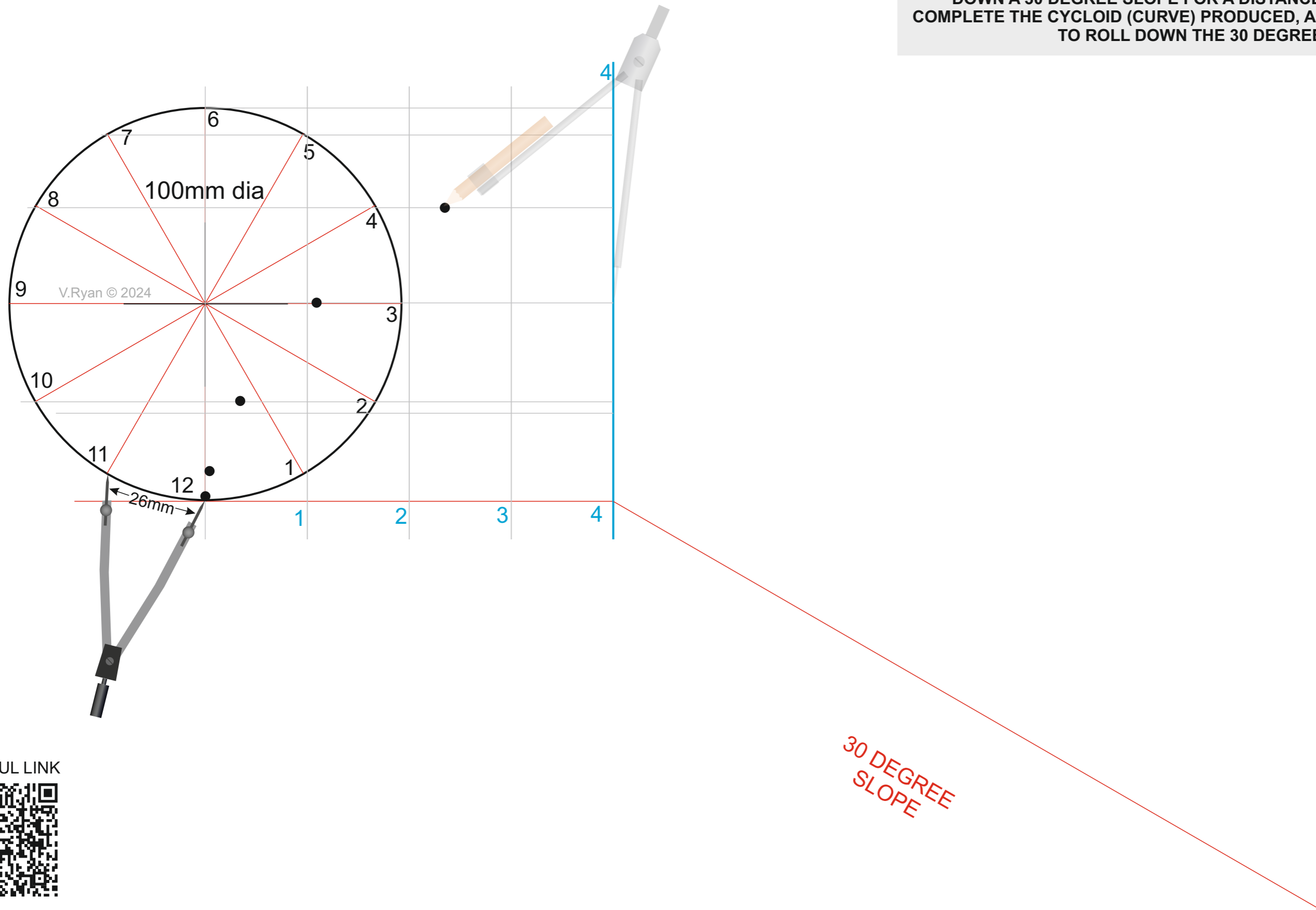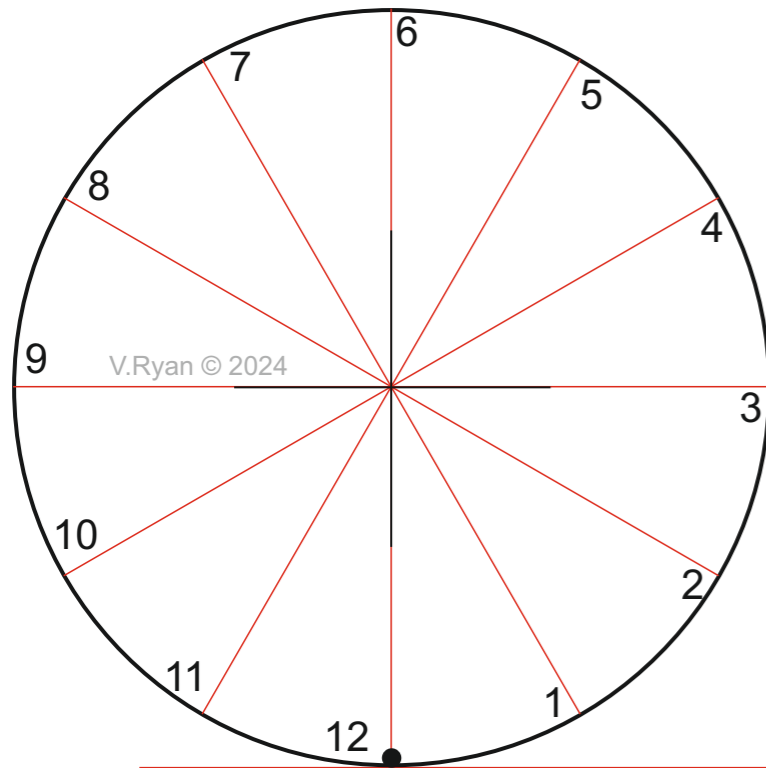
HELPFUL LINK: https://technologystudent.com/despro_3/cycloid1.html

QUESTION

THE CIRCUMFERENCE OF THE CIRCLE HAS A POINT MARKED ON IT AS A DOT. THE CIRCLE ROLLS ALONG A 'FLAT' SURFACE FOR THE EQUIVALENT OF FOUR SECTOR DIVISIONS. IT THEN CONTINUES TO ROTATE AS IT ROLLS DOWN A 30 DEGREE SLOPE FOR A DISTANCE OF EIGHT SECTORS. COMPLETE THE CYCLOID (CURVE) PRODUCED, AS THE CIRCLE CONTINUES TO ROLL DOWN THE 30 DEGREE SLOPE.

100mm dia

26mm

1 2 3 4

30 DEGREE SLOPE

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HELPFUL LINK

CYCLOIDS

QUESTION

THE CIRCUMFERENCE OF THE CIRCLE HAS A POINT MARKED ON IT AS A DOT. THE CIRCLE ROLLS ALONG A 'FLAT' SURFACE . IT THEN CONTINUES TO ROTATE AS IT ROLLS DOWN A 30 DEGREE SLOPE.
DRAW THE CYCLOID (CURVE) PRODUCED, FOR ONE REVOLUTION OF THE CIRCLE.
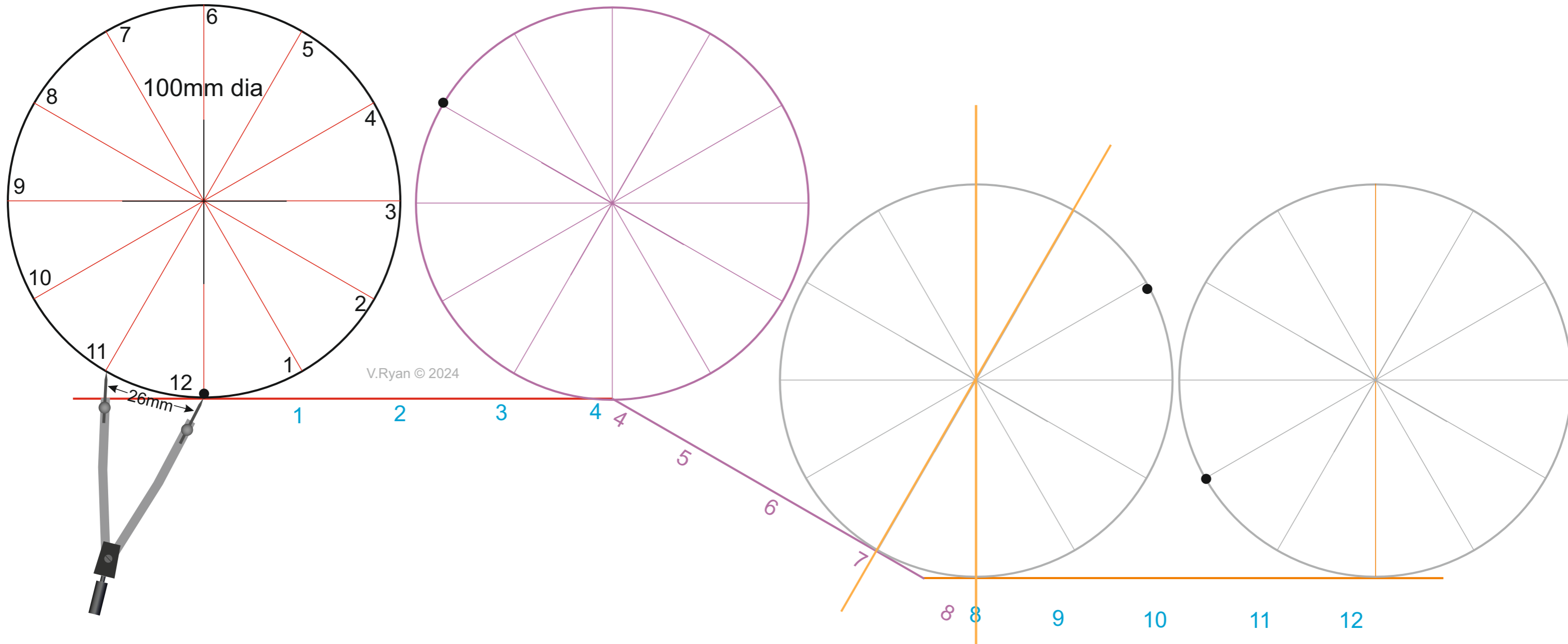

30 DEGREE SLOPE

HELPFUL LINK

HELPFUL LINK: https://technologystudent.com/despro_3/cycloid2.html

CYCLOIDS

100mm dia

26mm

1 2 3 4 5 6 7 8 9 10 11 12

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HELPFUL LINK

CYCLOIDS

QUESTION

**THE CIRCUMFERENCE OF THIS CIRCLE HAS A POINT MARKED ON IT AS A DOT. THE CIRCLE ROLLS ALONG A 'FLAT' SURFACE FOR THE EQUIVALENT OF FOUR SECTOR DIVISIONS. IT THEN CONTINUES TO ROTATE AS IT ROLLS DOWN A 30 DEGREE SLOPE FOR ANOTHER FOUR SECTOR DIVISIONS, FOLLOWED BY FOUR MORE SECTOR DISTANCES ON THE FLAT.
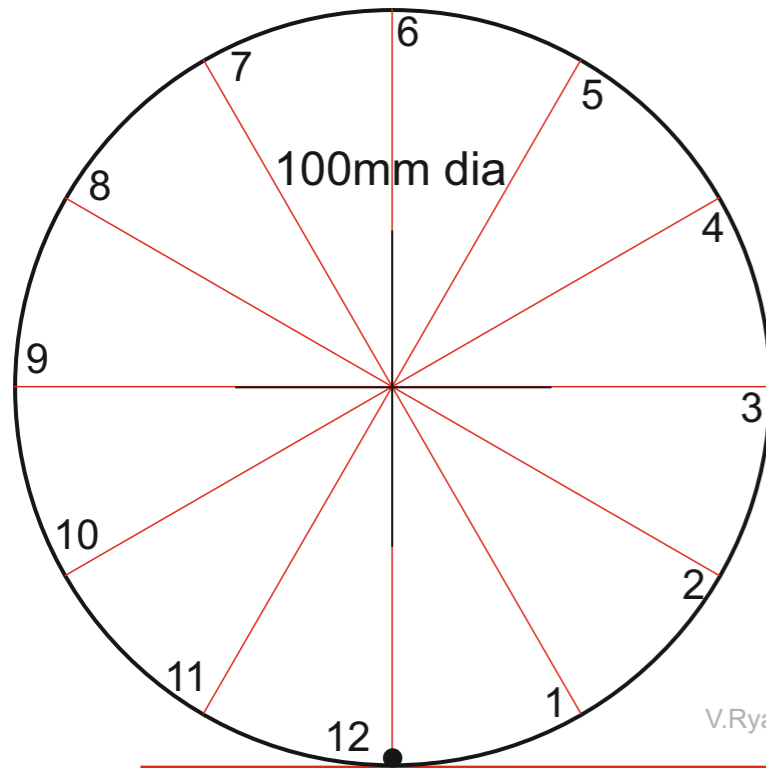DRAW THE CYCLOID (CURVE) PRODUCED BY ONE ROTATION**

100mm dia

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HELPFUL LINK