

Quiz 2 – grad 9 – mathematic

One of the solutions of the two equations : $x - y = 2$, $x^2 + y^2 = 20$

in $\mathbb{R} \times \mathbb{R}$ is

(El-Kalyoubia 19 – Qena 17)

- (a) $(-4, 2)$ (b) $(2, -4)$ (c) $(3, 1)$ (d) $(4, 2)$

Two positive integers , their sum is 8 and their product is 15 , then the two integers are

(Suez 16)

- (a) 2 , 6 (b) 3 , 5 (c) 4 , 4 (d) 1 , 15

The two straight lines : $3x + 5y = 0$ and $5x - 3y = 0$ are intersecting on the

(Giza 22)

- (a) first quadrant. (b) second quadrant.
(c) origin point. (d) third quadrant.

The simplest form of the function $n : n(x) = \frac{4x^2 - 2x}{2x}$ where $x \neq 0$ is

(South Sinai 18)

- (a) $4x^2$ (b) $4x$ (c) $2x$ (d) $2x - 1$

The set of zeroes of the function $f : f(x) = x(x - 1)$ is (El-Gharbia 22)

- (a) $\{0, 1\}$ (b) $\{0, -1\}$ (c) $\{-1, 1\}$ (d) $\{1\}$
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The domain of the multiplicative inverse of the algebraic fraction $\frac{x-2}{x^3+27}$ is (Port Said 17)

- (a) $\mathbb{R} - \{2\}$ (b) $\mathbb{R} - \{-3, 2\}$ (c) $\mathbb{R} - \{2, -3, 3\}$ (d) $\mathbb{R} - \{3, -3\}$
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The domain of the function $n : n(x) = \frac{x}{x^2-1}$ is (Giza 19)

- (a) $\{-1\}$ (b) $\mathbb{R} - \{1\}$ (c) $\{1, -1\}$ (d) $\mathbb{R} - \{1, -1\}$
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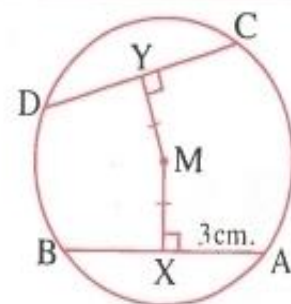
In the opposite figure :

$\overline{MX} \perp \overline{AB}$, $\overline{MY} \perp \overline{CD}$

, $MX = MY$

and $AX = 3$ cm.

Find : The length of \overline{CD}



« Beni Suef 17 »

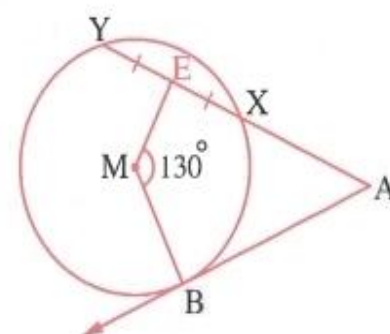
In the opposite figure :

\overrightarrow{AB} is a tangent to the circle M

, E is the midpoint of \overline{XY}

, $m(\angle BME) = 130^\circ$

Find : $m(\angle A)$



« Giza 18 »

In the opposite figure :

\overline{AB} and \overline{BC} are two chords in the circle M

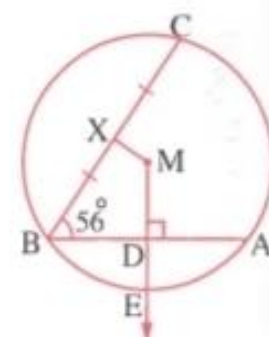
whose radius length is 5 cm. , $\overline{MD} \perp \overline{AB}$ and cuts \overline{AB}

at D and cuts the circle at E , X is the midpoint of \overline{BC}

, $AB = 8$ cm. and $m(\angle ABC) = 56^\circ$

Find : 1 $m(\angle DMX)$

2 The length of \overline{DE}



« El-Gharbia 17 »