

Nama :

Kelas/No:

LKPD ONLINE

GARIS SINGGUNG LINGKARAN

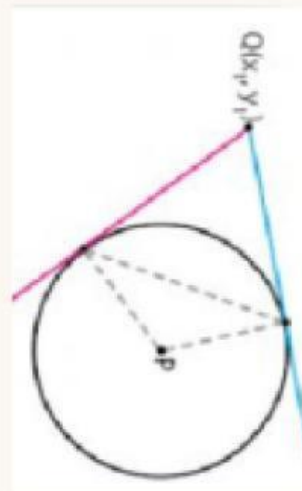
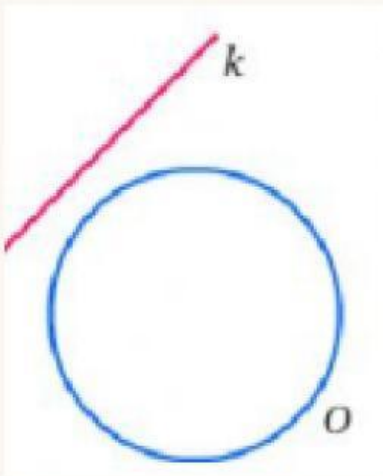
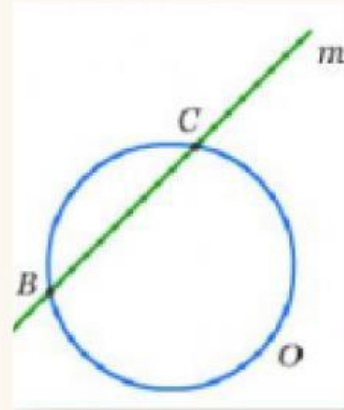
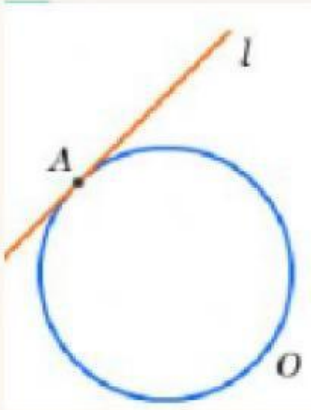
MATEMATIKA – FASE F

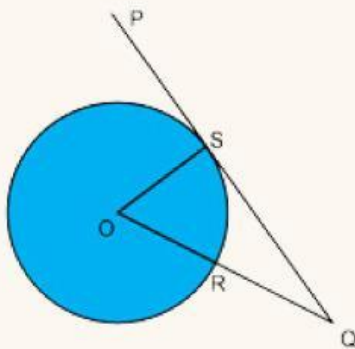
SMA NEGERI 3 KUTA SELATAN

PUTU TITA INGGRANI CINTYA DEWI, S.Pd., M.M.



Apakah gambar dibawah ini merupakan Garis Singgung Lingkaran?





Soal No. 1

PQ adalah garis singgung lingkaran O yang berjari-jari 5 cm.

Jika panjang garis OQ adalah 13 cm. Tentukan luas segitiga QOS!

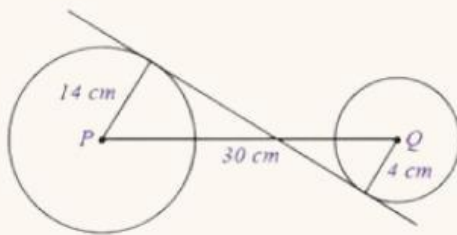
$$QS = \sqrt{OQ^2 - OS^2}$$

$$QS = \sqrt{\quad^2 - \quad^2}$$

$$QS = \sqrt{169 - \quad}$$

$$QS = \sqrt{\quad}$$

$$QS = 12 \text{ cm}$$



Soal No. 2

Tentukan Panjang Garis Singgung persekutuan dalam pada gambar disamping !

Diketahui

$$R = \quad \text{cm}$$

$$r = \quad \text{cm}$$

$$\text{Jarak Titik Pusat Lingkaran} = PQ = \quad \text{cm}$$

Ditanya :

$$\text{Garis Singgung Dalam (GSD) Lingkaran} = \quad ?$$

Jawab :

$$GSD = \sqrt{PQ^2 - (R + r)^2}$$

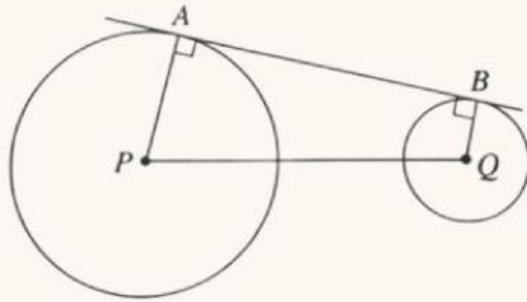
$$GSD = \sqrt{\quad^2 - (\quad + \quad)^2}$$

$$GSD = \sqrt{\quad^2 - \quad^2}$$

$$GSD = \sqrt{\quad - \quad}$$

$$GSD = \sqrt{\quad}$$

$$GSD = \quad \text{cm}$$



Soal Nomor 3

Pada gambar di samping, panjang jari-jari $PA = 11$ cm, panjang jari-jari $QB = 5$ cm, dan jarak $PQ = 10$ cm. Hitunglah panjang garis singgung persekutuan luar AB !

Diketahui

$R = \underline{\hspace{2cm}}$ cm

$r = \underline{\hspace{2cm}}$ cm

Jarak Titik Pusat Lingkaran = $PQ = \underline{\hspace{2cm}}$ cm

Ditanya :

Garis Singgung Luar (GSL) Lingkaran = $\underline{\hspace{2cm}}$?

Jawab :

$$GSL = \sqrt{PQ^2 - (R - r)^2}$$

$$GSL = \sqrt{\underline{\hspace{1cm}}^2 - (\underline{\hspace{1cm}} - \underline{\hspace{1cm}})^2}$$

$$GSL = \sqrt{\underline{\hspace{1cm}}^2 - \underline{\hspace{1cm}}^2}$$

$$GSL = \sqrt{\underline{\hspace{1cm}} - \underline{\hspace{1cm}}}$$

$$GSL = \sqrt{\underline{\hspace{1cm}}}$$

$$GSL = \underline{\hspace{1cm}} \text{ cm}$$