

TOPIK: RUMUS ALGEBRA

1. Given that $\frac{3m^2n}{L^2} = 4$ express L in terms of m and n

Diberi bahawa $\frac{3m^2n}{L^2} = 4$, ungkapkan L dalam sebutan m dan n

A $3m^2n \times 4$

C $\frac{3m^2n}{L}$

B $\sqrt{\frac{3m^2n}{4^2}}$

D $\sqrt{\frac{3m^2n}{4}}$

2. Given that $\sqrt{\frac{x-4}{3y}} = 2$, express y in terms of x

Diberi bahawa $\sqrt{\frac{x-4}{3y}} = 2$, ungkapkan y dalam sebutan x

A $\frac{x-4}{4}$

C $\frac{x-4}{6}$

B $\frac{x-4}{1}$

D $\frac{x^2-4^2}{6^2}$

3. Given $T = \sqrt{\frac{3}{n}} + 4m$, express n in terms of T and m .

Diberi $T = \sqrt{\frac{3}{n}} + 4m$, ungkapkan n dalam sebutan T dan m .

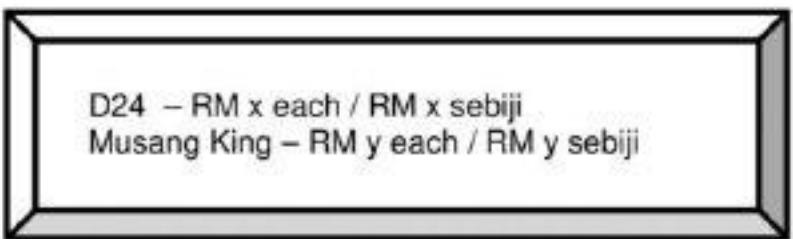
A $n = 3(T - 4m)^2$

C $n = \frac{3}{T^2 - 4m^2}$

B $n = 9(T - 4m)^2$

D $n = \frac{3}{(T - 4m)^2}$

4. Diagram below shows the prices of two types of durian in a fruit stall.
Rajah di bawah menunjukkan harga dua jenis durian di sebuah gerai buah-buahan.



A customer paid RM 145 for 4 durian D24 and 3 durian musang king. Express y in terms of x.

Seorang pelanggan membayar RM145 untuk 4 biji durian D24 dan 3 biji durian musang king. Ungkapkan y dalam sebutan x.

A $y = \frac{145 - 4x}{3}$

C $y = \frac{4x - 145}{3}$

B $y = \frac{145 - 3x}{4}$

D $y = \frac{3x - 145}{4}$

5. Given $P = \sqrt{\frac{4}{q}} + 3r$, express q in terms of P and r.

Diberi $P = \sqrt{\frac{4}{q}} + 3r$, ungkapkan q dalam sebutan P dan r.

A $q = 4(P - 3r)^2$

C $q = \frac{4}{P^2 - 3r^2}$

B $q = 16(P - 3r)^2$

D $q = \frac{4}{(P-3r)^2}$

6. Given that $\frac{1}{L} = \frac{1}{M} + \frac{M}{N}$, express N in terms of L and M.

Diberi $\frac{1}{L} = \frac{1}{M} + \frac{M}{N}$, ungkapkan N dalam sebutan L dan M.

A $N = \frac{LM^2}{M - L}$

C $N = \frac{M - L}{LM^2}$

B $N = \frac{LM^2}{L - M}$

D $N = M(L - M)$

7. Given that $3p = \frac{4}{\sqrt{q+1}}$, then q =

Diberi bahawa $3p = \frac{4}{\sqrt{q+1}}$, maka q =

A $\frac{1}{9p^2} + 1$

C $(\frac{4}{3p} + 1)^2$

B $(\frac{4}{3p} - 1)^2$

D $\frac{1}{9p^2} - 1$

8. If $\frac{1}{2}p = \frac{3}{2}k - 2\sqrt{r}$, express k in terms of p, q and r.

Jika $\frac{1}{2}p = \frac{3}{2}k - 2\sqrt{r}$, ungkapkan k dalam sebutan p, q dan r.

A $k = \frac{p+4\sqrt{r}}{3q}$

C $k = \frac{p-4\sqrt{r}}{3q}$

B $k = \frac{4\sqrt{r}}{3q} - \frac{p}{3q}$

D $k = \frac{4\sqrt{r}}{3q} + \frac{p}{3q}$

9. Given that $2 - 7m^2 = 9(p + m^2)$, express m in term of p.

Diberi $2 - 7m^2 = 9(p + m^2)$, ungkapkan m dalam sebutan p.

A $m = \frac{\sqrt{2-9p}}{16}$

C $m = \frac{\sqrt{2-9p}}{4}$

B $m = \frac{\sqrt{9p-2}}{16}$

D $m = \frac{\sqrt{9p-2}}{4}$

10. Given that $p = \frac{6+5q}{q-3}$ express q in term of p.

Diberi $p = \frac{6+5q}{q-3}$, ungkapkan q dalam sebutan p.

A $\frac{p+5}{3(2-p)}$

C $\frac{3(2-p)}{p+5}$

B $\frac{p-5}{3(2+p)}$

D $\frac{3(2+p)}{p-5}$