## MATHS WORLD

තාත්වික සංඛ්යා ශ්රේණිය :- 11 01 පාඩම

1. මෙම අඛිල කරණි, සරල ම ආකාරයෙන් (කරණි ලෙස) ලියන්න.

1) 
$$\sqrt{12}$$

1) 
$$\sqrt{12}$$
 2) $\sqrt{27}$ 

$$3)\sqrt{28}$$
  $4)\sqrt{32}$ 

$$4)\sqrt{32}$$

$$5)\sqrt{45}$$

$$6)\sqrt{48}$$

$$5)\sqrt{45}$$
  $6)\sqrt{48}$  7)  $\sqrt{50}$  8)  $\sqrt{63}$ 

8) 
$$\sqrt{63}$$

9) 
$$\sqrt{72}$$

$$10)\sqrt{150}$$

$$11)\sqrt{162}$$

$$12)\sqrt{200}$$

$$13)\sqrt{192}$$

$$14)\sqrt{245}$$

9) 
$$\sqrt{72}$$
 10) $\sqrt{150}$  11) $\sqrt{162}$  12) $\sqrt{200}$  13) $\sqrt{192}$  14) $\sqrt{245}$  15)  $\sqrt{252}$  16)  $\sqrt{300}$ 

16) 
$$\sqrt{300}$$

17) 
$$\sqrt{450}$$

$$19)\sqrt{800}$$

17) 
$$\sqrt{450}$$
 18)  $\sqrt{500}$  19)  $\sqrt{800}$  20)  $\sqrt{1728}$  21)  $\sqrt{2800}$  22)  $\sqrt{4500}$  23)  $\sqrt{5\frac{5}{9}}$  24)  $\sqrt{7\frac{1}{5}}$ 

$$22)\sqrt{4500}$$

23) 
$$\sqrt{5\frac{5}{9}}$$

24) 
$$\sqrt{7} \frac{1}{5}$$

2. මෙම සරල ම කරණි. අඛිල කරණි ලෙස ලියන්න.

1) 
$$2\sqrt{7}$$

2) 
$$3\sqrt{5}$$

3) 
$$6\sqrt{7}$$

1) 
$$2\sqrt{7}$$
 2)  $3\sqrt{5}$  3)  $6\sqrt{7}$  4)  $7\sqrt{2}$  5)  $2\sqrt{17}$  6)  $8\sqrt{7}$  7)  $2\sqrt{3}$  8)  $5\sqrt{2}$ 

5) 
$$2\sqrt{17}$$

6) 
$$8\sqrt{7}$$

7) 
$$2\sqrt{3}$$

8) 
$$5\sqrt{2}$$

9) 
$$3\sqrt{7}$$

10) 
$$3\sqrt{2}$$

11) 
$$4\sqrt{7}$$

12) 
$$13\sqrt{5}$$

13) 
$$12\sqrt{5}$$

9) 
$$3\sqrt{7}$$
 10)  $3\sqrt{2}$  11)  $4\sqrt{7}$  12)  $13\sqrt{5}$  13)  $12\sqrt{5}$  14)  $15\sqrt{21}$  15)  $\sqrt[\frac{1}{2}]{5}$  16)  $\sqrt[\frac{1}{3}]{3}$ 

15) 
$$\sqrt[\frac{1}{2}]{5}$$

16) 
$$\sqrt[\frac{1}{3}]{3}$$

3. සුළු කරන්න.

1) 
$$5\sqrt{2} + 2\sqrt{2}$$

2) 
$$3\sqrt{3} - 2\sqrt{3}$$

2) 
$$3\sqrt{3} - 2\sqrt{3}$$
 3)  $6\sqrt{3} + 2\sqrt{3}$  4)  $5\sqrt{12} + \sqrt{27}$ 

4) 
$$5\sqrt{12} + \sqrt{27}$$

5) 
$$5\sqrt{18} - 2\sqrt{2}$$

6) 
$$2\sqrt{12} + 4\sqrt{48}$$

$$7)2\sqrt{5} + 3\sqrt{5} + \sqrt{5}$$

5) 
$$5\sqrt{18} - 2\sqrt{2}$$
 6)  $2\sqrt{12} + 4\sqrt{48}$  7)  $2\sqrt{5} + 3\sqrt{5} + \sqrt{5}$  8)  $6\sqrt{12} + \sqrt{3} - 2\sqrt{48}$ 

9) 
$$3\sqrt{54} - 9\sqrt{24} + 12\sqrt{6}$$
 10)  $2\sqrt{20} + 3\sqrt{45} + 5\sqrt{80}$  11)  $3\sqrt{20} - \sqrt{5} - 2\sqrt{45}$  12)  $6\sqrt{24} + 2\sqrt{3} - \sqrt{12}$ 

10) 
$$2\sqrt{20} + 3\sqrt{45} + 5\sqrt{80}$$

11) 
$$3\sqrt{20} - \sqrt{5} - 2\sqrt{45}$$

12) 
$$6\sqrt{24} + 2\sqrt{3} - \sqrt{12}$$

4. සුළු කරන්න.

1) 
$$3\sqrt{7} \times 2\sqrt{7}$$

$$2) \ 2\sqrt{3} \ \times \ 3\sqrt{7}$$

1) 
$$3\sqrt{7} \times 2\sqrt{7}$$
 2)  $2\sqrt{3} \times 3\sqrt{7}$  3)  $\sqrt{2} \times \sqrt{2} \times \sqrt{16}$  4)  $5\sqrt{2} \times 3\sqrt{12}$ 

4) 
$$5\sqrt{2} \times 3\sqrt{12}$$

5) 
$$3\sqrt{2} \times 5\sqrt{14}$$
 6)  $\frac{\sqrt{8}}{\sqrt{2}}$ 

$$6) \ \frac{\sqrt{8}}{\sqrt{2}}$$

7) 
$$\frac{4\sqrt{8}}{2\sqrt{2}}8$$
)  $4\sqrt{2} \div \sqrt{28}$ 

$$9)\frac{\sqrt{3}}{3\sqrt{15}}$$

10) 
$$\frac{\sqrt{132}}{\sqrt{22}}$$

11) 
$$2\sqrt{\frac{5}{7}} \times 5\sqrt{\frac{14}{50}}$$

11) 
$$2\sqrt{\frac{5}{7}} \times 5\sqrt{\frac{14}{50}}$$
 12)  $6\sqrt{1\frac{3}{4}} \div 2\sqrt{3\frac{1}{9}}$ 

5. හරය පරිමේය කරන්න.

1)
$$\frac{3}{\sqrt{2}}$$

2) 
$$\frac{1}{\sqrt{7}}$$

3) 
$$\frac{5}{3\sqrt{5}}$$

$$4)\frac{3\sqrt{2}}{\sqrt{5}}$$

1)
$$\frac{3}{\sqrt{2}}$$
 2)  $\frac{1}{\sqrt{7}}$  3)  $\frac{5}{3\sqrt{5}}$  4) $\frac{3\sqrt{2}}{\sqrt{5}}$  5)  $\frac{1}{\sqrt{27}}$  6) $\frac{6\sqrt{7}}{5\sqrt{2}}$ 

$$(6)\frac{6\sqrt{7}}{5\sqrt{2}}$$

7) 
$$\frac{10}{\sqrt{5}}$$

8) 
$$\frac{11\sqrt{15}}{3\sqrt{3}}$$
 9)  $\frac{4\sqrt{18}}{2\sqrt{6}}$ 

9) 
$$\frac{4\sqrt{18}}{2\sqrt{6}}$$

10) 
$$\frac{5\sqrt{48}}{\sqrt{15}}$$

10) 
$$\frac{5\sqrt{48}}{\sqrt{15}}$$
 11)  $\frac{2\sqrt{72}}{3\sqrt{13}}$ 

12) 
$$\frac{7\sqrt{3}}{\sqrt{29}}$$

$$13)\frac{\sqrt{5}}{\sqrt{10}}$$

14) 
$$\frac{1}{\sqrt{3}-\sqrt{2}}$$

15) 
$$\frac{\sqrt{2}+1}{\sqrt{2}-1}$$

16) 
$$\frac{2\sqrt{5}+1}{2\sqrt{5}-1}$$

17) 
$$\frac{12\sqrt{56}}{\sqrt{42}}$$

$$13)\frac{\sqrt{5}}{\sqrt{10}} \qquad \qquad 14) \ \frac{1}{\sqrt{3}-\sqrt{2}} \qquad \qquad 15) \ \frac{\sqrt{2}+1}{\sqrt{2}-1} \qquad \qquad 16) \ \frac{2\sqrt{5}+1}{2\sqrt{5}-1} \qquad \qquad 17) \ \frac{12\sqrt{56}}{\sqrt{42}} \qquad \qquad 18) \ \frac{5\sqrt{3}}{3\sqrt{2}\times3\sqrt{2}}$$