

Mathematics for grad"10".First Semester.

11: 01

Use "rational" or "Irrational" in your answer.

1) $\frac{3.78}{100}$ ()

2) 3.33° ()

3) $\frac{7\pi}{22}$ ()

4) $(8 - \sqrt{3})^2$ ()

5) $\left(\frac{\sqrt{10}}{5}\right)^2$ ()

6) $(7\pi)^4$ ()

7) $\left(\frac{3\sqrt{5}}{5}\right)^2$ ()

8) $\frac{\sqrt{19}}{\sqrt{4}}$ ()

11: 02

Give the simplest answer for:

1) $\sqrt{\frac{72}{2}}$ =

2) $\sqrt{\frac{121}{36}}$ =

4) $\frac{\sqrt{40}}{\sqrt{250}}$ =

$$5) (3\sqrt{x-4})^2 =$$

$$6) \left(\frac{x}{\sqrt{x}}\right)^2 =$$

$$7) \left(\sqrt{\frac{\sqrt{x^3y^4}}{\sqrt{12y^2}}} \times \frac{4}{y}\right)^2 =$$

11:03

Find the basic numeral in each case:

$$1) \left(\frac{\sqrt{160}}{16} \times \sqrt{2}\right) - \sqrt{500} + \frac{\sqrt{35}}{\sqrt{5}}$$

$$2) \frac{10\sqrt{2}}{2} + 6\sqrt{18} + \sqrt{12.5}$$

$$3) \frac{7}{\sqrt{2}} - \sqrt{\frac{36}{2}} + \left(\sqrt{\frac{5\sqrt{2}}{2}}\right)^2$$

$$4) \sqrt{75} + \sqrt{27} - \sqrt{24}$$

$$5) \sqrt{8} - \sqrt{32} + \frac{14\sqrt{9}}{\sqrt{49}}$$