

Calculator License **Practice Exam** Name KEY
 Date _____

- ❖ Compute each of the following without a calculator.
- ❖ Give an exact answer if possible. If not possible, round answers to 3 decimal places.
- ❖ Reduce all fractions to their simplest form.
- ❖ Simplify all radicals.
- ❖ Take your time and check your work carefully.
- ❖ Do scrap work on a separate sheet of paper if you need more room.

1) $3.6759 + 34.7653 =$

$$\begin{array}{r} 34.7653 \\ + 3.6759 \\ \hline 38.4412 \end{array}$$

2) $13.5 \times 4.663 =$

$$\begin{array}{r} 13.5 \\ \times 4.663 \\ \hline 4065 \\ 8100 \\ 54000 \\ \hline 629505 \end{array}$$

3) $37.5 \div 7 =$

$$\begin{array}{r} 5.3571 \\ 7 \overline{) 37.500} \\ \underline{35} \\ 25 \\ \underline{21} \\ 40 \\ \underline{35} \\ 50 \\ \underline{49} \\ 10 \end{array}$$

4) $4875 \div 124 =$

$$\begin{array}{r} 39.3145 \\ 124 \overline{) 4875.000} \\ \underline{372} \\ 1155 \\ \underline{1116} \\ 390 \\ \underline{372} \\ 180 \\ \underline{124} \\ 560 \\ \underline{496} \\ 640 \end{array}$$

5) $429 - 558 =$

$$\begin{array}{r} 558 \\ - 429 \\ \hline 129 \end{array}$$

-129

6) $4\frac{2}{7} + 2\frac{2}{9} =$

$$\frac{30}{7} + \frac{20}{9} = \frac{270}{63} + \frac{140}{63} = \frac{410}{63}$$

$$7) \sqrt[4]{(4^3)^2} =$$

$$= (4^6)^{\frac{1}{4}}$$

$$= 4^{\frac{3}{2}}$$

$$= 8$$

$$8) \frac{3}{5} \times \frac{4}{7} = \frac{12}{35}$$

$$9) \frac{3}{10} \div \frac{15}{320} =$$

$$\frac{3}{10} \cdot \frac{320}{15} = \frac{32}{5}$$

$$10) \sqrt{13^2 - 12^2} = \sqrt{169 - 144}$$

$$= \sqrt{25}$$

$$= 5$$

$$11) 2^2(8 + 4(2^2 - (-5)^2) - 6) =$$

$$4(8 + 4(4 - 25) - 6)$$

$$4(8 + 4(-21) - 6)$$

$$4(8 - 84 - 6)$$

$$4(-82) = -328$$

$$12) 3\sqrt{28} + 2\sqrt{112} =$$

$$3 \cdot 2\sqrt{7} + 2 \cdot 4\sqrt{7}$$

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

$$14\sqrt{7}$$

$$\begin{array}{r} 16 \\ 7 \overline{) 112} \\ \underline{7} \\ 42 \end{array}$$

$$13) (x+3)^0 =$$

$$1$$

$$14) 6 \div 3\frac{2}{7} =$$

$$6 \div \frac{23}{7}$$

$$6 \cdot \frac{7}{23} = \frac{42}{23}$$

$$15) 27^{\frac{1}{3}} = \textcircled{3}$$

$$16) 62\% \text{ of } 48 =$$

$$\frac{62}{100} = \frac{x}{48}$$

$$2976 = 100x$$

$$x = 29.76$$

$$\begin{array}{r} 62 \\ 48 \\ \hline 496 \\ 2976 \end{array}$$

$$17) 72\% \text{ of } 83$$

$$\begin{array}{r} 83 \\ 72 \\ \hline 166 \end{array}$$

$$\begin{array}{r} 581 \\ \hline 59.76 \end{array}$$

$$18) \frac{3}{13} = \text{ _____\%}$$

$$\begin{array}{r} .230 \\ 13 \overline{) 3.00000} \\ \underline{26} \\ 40 \\ \underline{39} \\ 10 \end{array}$$

$$\textcircled{23\%}$$

$$19) 0.035 = \text{ _____\%}$$

$$\textcircled{3.5\%}$$

$$20) 56 \text{ is } \text{ _____\%} \text{ of } 86$$

$$\frac{56}{86} = \frac{x}{100}$$

$$5600 = 86x$$

$$\begin{array}{r} 65.1162 \\ 86 \overline{) 5600.000} \\ \underline{516} \end{array}$$

$$\begin{array}{r} 440 \\ 430 \\ \hline 100 \\ 86 \end{array}$$

$$\begin{array}{r} 140 \\ 86 \\ \hline 540 \end{array}$$

$$\begin{array}{r} 540 \\ 516 \\ \hline 240 \end{array}$$

$$\textcircled{65.116\%}$$