

All exam answers are to be in simplest form. No calculators may be used. No notes, no books, no homework may be used while taking this exam. Use blank spaces on the exam to show your work. Attach all scratch paper to the exam.

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Write the decimal as indicated.

- 1) 83.026, in words
 → A) Eighty-three and twenty-six thousandths
 B) Eighty-three and twenty-six ten-thousandths
 C) Eighty-three and twenty-six hundredths
 D) Eighty-three and twenty-six tenths
- 2) Seven thousand and thirty-seven thousandths, in standard form
 → A) 7000.037 B) 700.037 C) 7000.0037 D) 7000.37

Round the decimal to the indicated place value.

- 3) 12.256, nearest tenth = 12.3
 12.256
 ↓ TENTH
 ↑ ROUND 2 TO 3 BECAUSE OF THIS 5. DROP 5 & 6.
- 4) 84.2, nearest one = 84
 84.2
 ↓ ONES PLACE
 KEEP 4 AS IS BECAUSE OF THIS 2. - NO DECIMAL POINT ON NUMBER
- 5) 21.8, nearest ten = 20
 21.8
 ↓ TENS
 SINCE THIS IS 1, DON'T ROUND THE 2 UP. REPLACE THIS 1 WITH 0 & NO DECIMAL POINT
- 6) 5.764, nearest hundredth = 5.76
 5.764
 ↓ HUNDRETHS PLACE
 DROP THIS & DON'T ROUND UP 6.

Insert <, >, or = between the pair of numbers to form a true statement.

7) $\frac{15}{4} < 3.751$
 3.750 3.751

$\frac{15}{4} = 3.75$ → $4 \overline{)15.00}$ OR 3.750
 $\begin{array}{r} 3.75 \\ -12 \\ \hline 30 \\ -28 \\ \hline 20 \end{array}$

Write the decimal as a fraction or mixed number in simplest form.

8) 48.851 = $48 \frac{851}{1000}$ $0.851 = \frac{851}{1000}$ (CAN'T REDUCE) $\frac{20}{20}$

9) 0.112 = $\frac{14}{125}$ $0.112 = \frac{112}{1000} = \frac{56}{500} = \frac{28}{250} = \frac{14}{125}$

Write the fraction or mixed number as a decimal. If necessary, round to the nearest thousandth.

$$10) \frac{7}{25} = \underline{0.28}$$

$$\begin{array}{r} .28 \\ 25 \overline{) 7.00} \\ \underline{-50} \\ 200 \\ \underline{-200} \\ 0 \end{array}$$

$$11) 3\frac{5}{20} = \underline{3.25}$$

$$\begin{array}{r} .25 \\ 20 \overline{) 5.00} \\ \underline{-40} \\ 100 \\ \underline{-100} \\ 0 \end{array}$$

$$3 + 0.25 = 3.25$$

$$12) 5\frac{4}{9} = \underline{5.444}$$

$$\begin{array}{r} .4444 \\ 9 \overline{) 4.0000} \\ \underline{-36} \\ 40 \\ \underline{-36} \\ 40 \\ \underline{-36} \\ 40 \\ \underline{-36} \\ 4 \end{array}$$

$$\rightarrow .444 + 5.000 = 5.444$$

$$13) \frac{5}{11} = \underline{0.455}$$

$$\begin{array}{r} .4545 \\ 11 \overline{) 5.0000} \\ \underline{-44} \\ 60 \\ \underline{-55} \\ 50 \\ \underline{-44} \\ 60 \\ \underline{-55} \\ 5 \end{array}$$

Perform the indicated operations. Round the result to the nearest thousandth if necessary.

$$14) 75.16 + 69 + 30.341 = \underline{174.501}$$

$$\begin{array}{r} 75.160 \\ 69.000 \\ 30.341 \\ \hline 174.501 \end{array} \quad \text{LINE UP DECIMAL POINTS!}$$

$$15) \text{Subtract } 8.37 \text{ from } 61 = \underline{52.63}$$

$$\begin{array}{r} 61.00 \\ \underline{-8.37} \\ 52.63 \end{array} \quad \leftarrow \text{ADD 0'S \& LINE UP DECIMAL POINTS}$$

16)

$$\begin{array}{r} 88.3 \\ \times 6.7 \\ \hline 591.61 \end{array}$$

$$\begin{array}{r} 41 \\ 52 \\ \hline 88.3 \quad 1 \text{ PLACE} \\ \hline 6.7 \quad 1 \text{ PLACE} \\ \hline 6181 \\ 52980 \\ \hline 591.61 \leftarrow 2 \text{ DECIMAL PLACES} \end{array}$$

17) $11 \overline{)48.28} = \underline{4.389}$

LINE UP DECIMAL POINT

$$\begin{array}{r} 4.3890 \\ \hline 11 \overline{)48.2800} \\ 44 \\ \hline 42 \\ 33 \\ \hline 98 \\ -99 \\ \hline 100 \\ -99 \\ \hline 10 \end{array}$$

18) $0.25 \overline{)19} = \underline{76}$

$$\begin{array}{r} 76. \\ 0.25 \overline{)19.00} = 25 \overline{)1900.} \\ \text{2 PLACES} \quad \text{2 PLACES} \\ \hline 175 \\ \hline 150 \\ \hline -150 \end{array}$$

19)

$$\begin{array}{r} 0.286 \\ \times 0.44 \\ \hline 0.12584 = \underline{0.126} \end{array}$$

$$\begin{array}{r} 32 \\ .286 \leftarrow 3 \text{ PLACES} \\ \times 0.44 \leftarrow 2 \text{ PLACES} \\ \hline 1144 \\ 11440 \\ \hline 0.12584 \leftarrow 5 \text{ PLACES} \end{array}$$

20) $186.5 \times 100 = \underline{18650}$

MOVE DECIMAL POINT 2 PLACES TO THE RIGHT
 $186.5 \times \underline{100}$ 2 ZEROS = 2 PLACES

$$21) \frac{38.7}{10} = \underline{3.87}$$

$\frac{38.7}{10} \leftarrow$ 1 ZERO SO MOVE DECIMAL 1 PLACE TO THE LEFT WHEN DIVIDING

$$22) \frac{0.44 + 2.38}{0.3} = \underline{9.4}$$

DO 1ST

$$\frac{0.44 + 2.38}{0.3} = \frac{2.82}{0.3} \rightarrow 0.3 \overline{)2.82} = 3 \overline{)28.2}$$

$$\begin{array}{r} 9.4 \\ 3 \overline{)28.2} \\ \underline{-27} \\ 12 \\ \underline{-12} \\ 0 \end{array}$$

DO 1ST

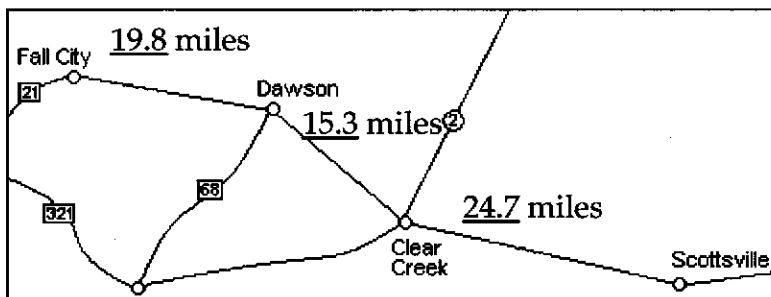
$$23) 0.5[1.86 - (0.4)^2] = \underline{0.85}$$

$$0.5[1.86 - (0.4)^2] = 0.5[1.86 - 0.16]$$

$$= 0.5[1.7]$$

$$= 0.85$$

24) Find the total distance from Fall City to Scottsville.



Distance 59.8 MILES

ADD DISTANCES

LINE UP

$$\begin{array}{r} 19.8 \\ 15.3 \\ 24.7 \\ \hline 59.8 \end{array}$$