

Name Key
Mrs. Ashley

Date _____
Math 6 - Period __

Write the place value of the underlined digit:
(tenths, hundredths, thousandths, ten-thousandths)

1) 45.0 <u>6</u> 7 Thousandths / 0.007	2) 5. <u>4</u> Tenths / 0.4
3) 0.7 <u>5</u> 2 Hundredths / 0.05	4) 33.3 <u>3</u> 33 ten-thousandths / 0.0003

Write each decimal in word form:

5) 5.205 Five <u>AND</u> two hundred five thousandths	6) 24.5 Twenty-Four <u>AND</u> five tenths
7) 4.07 Four <u>AND</u> seven hundredths	8) 1.2566 one <u>AND</u> two thousand five hundred sixty-six ten-thousandths

Compare the decimals using <(less than), >(greater than), or = (equal to).

9) 7.08 <u><</u> 7.8 less than	10) 0.150 <u>=</u> 0.15 equal to	11) 4.5617 <u><</u> 4.615 less than
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12) The exchange rates in U.S. dollars for several currencies are shown below.
Write the values in order from least to greatest.

Canadian Dollar	Euro	Japanese Yen	Mexican Peso	U.S. Dollar
1.1648	0.8375	114.18	10.767	1

Euro, U.S., Canadian \$, Peso, Yen

1.1648
0.8375
114.1800
10.7670
1.0000

13) Round 6.9421 to the nearest thousandths: 6.942

14) Round 0.645 to the nearest hundredths: 0.65

15) Round 34.799 to the nearest whole number: 35
(ones)

Use ESTIMATION to find the sum or difference. (Hint: Round both numbers first)

16) $75.73 + 20.23$
 $\downarrow \quad \downarrow$
 $76 + 20$
 $\approx \boxed{96}$

Actual: 95.96

17) $123.69 - 108.7$
 $\downarrow \quad \downarrow$
 $124 - 109$
 $\begin{array}{r} 124 \\ -109 \\ \hline 15 \end{array}$
 $\approx \boxed{15}$

Actual: 14.99

Solve. Show ALL work. Write answers in complete sentences.

18) Ryan is 2.75 meters tall while on stilts and 1.6 meters tall without stilts. How far off the ground do the stilts raise Ryan?

$$\begin{array}{r} 2.75 \\ - 1.60 \\ \hline 1.15 \end{array}$$

\downarrow
Subtraction

The stilts raise Ryan 1.15 meters off the ground.

19) A tube of watercolor paints is \$8.69, a paint brush is \$3.78, and a canvas is \$6.32. How much change would you get back if you paid with a \$20 bill?

① Add

$$\begin{array}{r} 8.69 \\ 3.78 \\ + 6.32 \\ \hline \$18.79 \end{array}$$

② Subtract from \$20

$$\begin{array}{r} 20.00 \\ - 18.79 \\ \hline \$1.21 \end{array}$$

You would get \$1.21 back in change after paying with a \$20 bill.

Solve. Show ALL work. Write answers in complete sentences.

20) Find the product. Show your work!
(Hint: line up the digits, NOT the decimals)

$$\begin{array}{r}
 0.4 \times 0.25 \\
 \times \quad \begin{array}{r} 0.25 \\ 0.4 \end{array} \\
 \hline
 0.1000 \\
 \hline
 \end{array}$$

Handwritten work for problem 20 shows the multiplication of 0.4 and 0.25. The numbers are aligned by digit. A horizontal line is drawn under 0.4. The product 0.1000 is written below. A green arrow points from the decimal point in 0.25 to the decimal point in 0.1000. Three boxes containing the numbers 2, 1, and 3 are written to the right of the numbers 0.25, 0.4, and 0.1000 respectively. A green arrow points from the 2nd box to the 1st box, and another from the 1st box to the 3rd box. The final answer 0.1 is boxed.

21) Find the quotient. Show your work!
Write the quotient as a decimal.

$$\begin{array}{r}
 68.40 \div 1.5 \\
 1.5 \overline{) 68.40} \\
 \underline{45} \\
 23 \\
 \underline{15} \\
 8 \\
 \underline{75} \\
 30 \\
 \underline{30} \\
 0
 \end{array}$$

Handwritten work for problem 21 shows the long division of 68.40 by 1.5. The divisor 1.5 is written to the left of the dividend 68.40. A horizontal line is drawn over 68.40. The quotient 45.6 is written above the line. The steps of the division are shown: 15 goes into 68 four times (45), leaving a remainder of 23. 15 goes into 23 one time (15), leaving a remainder of 8. 15 goes into 84 five times (75), leaving a remainder of 9. 15 goes into 90 six times (90), leaving a remainder of 0. The final answer 45.6 is boxed.

22) The surface of a rectangular air hockey table is 7.04 ft. long and 3.7 ft. wide. Find the area of the surface of the air hockey table. Round to the nearest hundredth.
(Hint: Area = length x width square units)

$$\begin{array}{r}
 A = l \cdot w \\
 \begin{array}{r} 7.04 \\ \times 3.7 \\ \hline 4928 \\ + 21120 \\ \hline 26.048 \\ \hline 26.05 \\ \hline \end{array} \\
 \hline
 \end{array}$$

Handwritten work for problem 22 shows the calculation of the area of a rectangular air hockey table. The formula A = l · w is written. The length 7.04 and width 3.7 are multiplied. The numbers are aligned by digit. A horizontal line is drawn under 3.7. The product 4928 is written below. A horizontal line is drawn under 21120. The sum 26.048 is written below. A green arrow points from the decimal point in 7.04 to the decimal point in 26.048. A box containing the number 2 is written to the right of 7.04, and a box containing the number 1 is written to the right of 3.7. A green arrow points from the 2nd box to the 1st box. The final answer 26.05 ft² is boxed.

The area of the air hockey table is 26.05 ft².

23) Sophie spent \$2.50 on pineapple juice. Pineapple juice costs \$0.10 per ounce. How many ounces of pineapple juice did Sophie buy? Show your work!

$$2.50 \div 0.10$$

$$0.10 \overline{) 2.50}$$

"slide, slide"

$$\begin{array}{r} 25. \\ 10 \overline{) 250.} \\ \underline{-20} \\ 50 \\ \underline{-50} \\ 0 \end{array}$$

Sophie bought 25 ounces of pineapple juice.

24) Casey gives her parents an engraved platter for their anniversary. It costs \$3.28 to engrave the words "HAPPY ANNIVERSARY" on the platter. How much does each letter cost to engrave?

$$\begin{array}{r} 0.205 \\ 16 \overline{) 3.280} \\ \underline{-32} \\ 080 \\ \underline{-80} \\ 0 \end{array}$$

→ 16 letters

$$0.205 \rightarrow 0.21$$

Money is rounded to nearest hundredths (cent)

Each letter costs \$0.21 to engrave on the platter.

25. Alex collects hockey cards. She has a book that displays ~~her~~ cards. Eight cards fit on each page. How many ^{Full} pages will Alex need if she has 246 cards? Show your work!

$$\begin{array}{r} \times 30.75 \\ 8 \overline{) 246.00} \\ \underline{-24} \\ 060 \\ \underline{-56} \\ 40 \\ \underline{-40} \\ 0 \end{array}$$

$$30.75$$

↓
Can't have 0.75 ($\frac{3}{4}$) of a page so Alex will need 1 more page.

Alex will need 31 pages to fit all her of her cards.