

DATC PRACTICE MATH TEST

Addition / Subtraction

Multiplication / Division

Fractions

Decimals / Percents

1. $\begin{array}{r} 862 \\ + 409 \\ \hline \end{array}$	2. $\begin{array}{r} 985 \\ 802 \\ + 47 \\ \hline \end{array}$	3. $\begin{array}{r} 834 \\ 302 \\ + 948 \\ \hline \end{array}$	4. $\begin{array}{r} 866 \\ - 328 \\ \hline \end{array}$	5. $\begin{array}{r} 7,102 \\ - 523 \\ \hline \end{array}$	6. $\begin{array}{r} 7,090 \\ - 1,983 \\ \hline \end{array}$
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7. $\begin{array}{r} 629 \\ \times 205 \\ \hline \end{array}$	8. $\begin{array}{r} 347 \\ \times 65 \\ \hline \end{array}$	9. $1,710 + 6 =$	10. $14,456 + 8 =$	11. $867 + 17 =$	12. $404 + 23 =$
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13. $\begin{array}{r} 1/6 \\ + 1/5 \\ \hline \end{array}$	14. $\begin{array}{r} 9 \frac{5}{6} \\ + 3 \frac{7}{7} \\ \hline \end{array}$	15. $\begin{array}{r} 5 \frac{5}{8} \\ + 3 \frac{4}{4} \\ \hline \end{array}$	16. $\begin{array}{r} 7/8 \\ - 2/3 \\ \hline \end{array}$	17. $\begin{array}{r} 8 \\ - 5 \frac{5}{8} \\ \hline \end{array}$	18. $\begin{array}{r} 1/6 \\ - 1/5 \\ \hline \end{array}$
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19. $2/3 \times 7/8 =$	20. $4/5 \times 2 \frac{5}{6} =$	21. $2 \frac{3}{8} \times 4 =$	22. $1/8 + 2/3 =$	23. $10 + 5/8 =$	24. $1/8 + 2/3 =$
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25. $\begin{array}{r} 2.3 \\ + 2.8 \\ \hline \end{array}$	26. $\begin{array}{r} 15.15 \\ 3.4 \\ + 250.702 \\ \hline \end{array}$	27. $\begin{array}{r} 35.45 \\ - 6.92 \\ \hline \end{array}$	28. $\begin{array}{r} 22.9 \\ - 9.803 \\ \hline \end{array}$	29. $56.3 \times 0.2 =$	30. $.5 \times 0.06 =$
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31. $18.321 + 0.003 =$	32. $36 + 1.8 =$	33. 21% changed to a decimal is:	34. 3% of 140 =	35. 150% changed to a decimal is:	36. 210% of 20 =
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37. 5 1/2 % of \$10,000 =	38. 18 is what % of 360?	39. 130 is what % of 50?
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ANSWERS:

<u>1- 1,271</u>	<u>11- 51</u>	<u>21- 9 1/2</u>	<u>31- 6,107</u>
<u>2- 1,834</u>	<u>12- 17 r 13</u>	<u>22- 3/16</u>	<u>32- 20</u>
<u>3- 2,084</u>	<u>13- 11/30</u>	<u>23- 16</u>	<u>33- 0.21</u>
<u>4- 538</u>	<u>14- 10 11/42</u>	<u>24- 2 3/8</u>	<u>34- 4.2</u>
<u>5- 6,579</u>	<u>15- 6 3/8</u>	<u>25- 5.1</u>	<u>35- 1.5</u>
<u>6- 5,107</u>	<u>16- 5/24</u>	<u>26- 269.252</u>	<u>36- 42</u>
<u>7- 128,945</u>	<u>17- 2 3/8</u>	<u>27- 28.53</u>	<u>37- 550</u>
<u>8- 22,555</u>	<u>18- 2 11/24</u>	<u>28- 13.097</u>	<u>38- 5%</u>
<u>9- 285</u>	<u>19- 7/12</u>	<u>29- 11.26</u>	<u>39- 260%</u>
<u>10- 1,807</u>	<u>20- 2 4/15</u>	<u>30- 0.03</u>	

EXAMPLES OF FRACTIONS

$$\frac{1}{2} \begin{array}{l} \text{Numerator} \\ \text{Denominator} \end{array}$$

ADDITION

Find the common denominator.

$$\frac{7}{20} + \frac{2}{5} = \frac{7}{20} + \frac{8}{20}$$

example: $20 \div 5 = 4$ $4 \times 2 = 8$ $= 8/20$

Add numerators.
The denominator stays the same.

$$\frac{7}{20} + \frac{8}{20} = \frac{15}{20} = \frac{3}{4}$$

example: $15 \div 5 = 3$ $20 \div 5 = 4$ $= 3/4$

SUBTRACTION

Find the common denominator.

$$\frac{11}{12} - \frac{1}{4} = \frac{11}{12} - \frac{3}{12}$$

Subtract numerators.
The Denominator stays the same.

$$\frac{11}{12} - \frac{3}{12} = \frac{8}{12} = \frac{2}{3}$$

MULTIPLICATION

Multiply numerators.
Multiply denominators.

$$\frac{4}{5} \times \frac{2}{3} = \frac{8}{15}$$

DIVISION

Rewrite the problem as a
multiplication problem by
inverting the divisor.

$$\frac{1}{2} \div \frac{3}{4} = \frac{1}{2} \times \frac{4}{3}$$

Multiply numerators.
Multiply denominators.

$$\frac{1}{2} \times \frac{4}{3} = \frac{4}{6} = \frac{2}{3}$$

EXAMPLES OF DECIMALS

ADDITION

Line up the decimal points.
Add.

$$\begin{array}{r} 253 \\ 572 \\ + 618 \\ \hline 3563 \end{array}$$

SUBTRACTION

Line up the decimal points.
Add zeros as place holders.
Subtract.

$$\begin{array}{r} 1250 \\ - 926 \\ \hline 324 \end{array}$$

MULTIPLICATION

Line up the digits.
Multiply.

Count the total number of decimal places in the factors to find out how many decimal places the product has.

2 decimal places	1.29
1 decimal place	<u> x 6.2</u>
	258
	<u> + 774</u>
3 decimal places	7.998

DIVISION BY A WHOLE NUMBER

Divide. $8.76 \div 3$

Put the decimal point in the quotient directly above the decimal point in the dividend.

$$\begin{array}{r} 2.92 \\ 3 \overline{) 8.76} \\ \underline{6} \\ 27 \\ \underline{27} \\ 06 \\ \underline{6} \\ 0 \end{array}$$

DIVISION BY A DECIMAL

Move the decimal point in the divisor to the right to make a whole number.

$$0.3 \overline{) 4.86}$$

Move the decimal point in the dividend the same number of places as in the divisor.

$$3 \overline{) 48.6}$$

Divide. Put the decimal point in the quotient above the decimal point in the dividend.

$$3 \overline{) 16.2} \\ \underline{48} \\ .6$$