

Study Guide for Multiplication, Long Division, and Divisibility Rules Test

Define the following terms:

- 1) product: the answer to a multiplication problem
- 2) divisor: the number that will divide the dividend ^{divisor} $9 \overline{)72}$
- 3) dividend: a quantity to be divided $9 \overline{)72}$ ← dividend
- 4) quotient: the answer to a division problem

Solve the following multiplication problems.

$$\begin{array}{r} 11 \\ 5. \quad 233 \\ \times 6 \\ \hline 1398 \end{array}$$

$$\begin{array}{r} 6. \quad 821 \\ \times 4 \\ \hline 3284 \end{array}$$

$$\begin{array}{r} 31 \\ 7. \quad 572 \\ \times 5 \\ \hline 2860 \end{array}$$

$$\begin{array}{r} 8. \quad 902 \\ \times 1 \\ \hline 902 \end{array}$$

$$\begin{array}{r} 2 \\ 9. \quad 572 \\ \times 36 \\ \hline 3432 \\ + 17160 \\ \hline 20592 \end{array}$$

$$\begin{array}{r} 11 \\ 10. \quad 368 \\ \times 20 \\ \hline 000 \\ + 7360 \\ \hline 7360 \end{array}$$

$$\begin{array}{r} 3 \\ 11. \quad 441 \\ \times 91 \\ \hline 441 \\ + 39690 \\ \hline 40131 \end{array}$$

$$\begin{array}{r} 3 \\ 12. \quad 682 \\ \times 47 \\ \hline 4774 \\ + 27280 \\ \hline 32054 \end{array}$$

Use the standard algorithm to find each quotient.

$$\begin{array}{r} 54 \\ 13. \quad 7 \overline{)378} \\ \underline{-35} \downarrow \\ 28 \\ \underline{-28} \\ 0 \end{array}$$

$$\begin{array}{r} 329 \\ 14. \quad 8 \overline{)2632} \\ \underline{-24} \downarrow \\ 23 \\ \underline{-16} \downarrow \\ 72 \\ \underline{-72} \\ 0 \end{array}$$

$$\begin{array}{r} 971 \\ 15. \quad 4 \overline{)3884} \\ \underline{-36} \downarrow \\ 28 \\ \underline{-28} \downarrow \\ 04 \\ \underline{-4} \\ 0 \end{array}$$

$$\begin{array}{r} 152 \\ 16. \quad 6 \overline{)912} \\ \underline{-6} \downarrow \\ 31 \\ \underline{-30} \downarrow \\ 12 \\ \underline{-12} \\ 0 \end{array}$$

$$17. \quad 16 \overline{) 448}$$

$$\begin{array}{r} 28 \\ -32 \downarrow \\ \hline 128 \\ -128 \\ \hline 0 \end{array}$$

$$18. \quad 35 \overline{) 630}$$

$$\begin{array}{r} 18 \\ -35 \downarrow \\ \hline 280 \\ -280 \\ \hline 0 \end{array}$$

$$19. \quad 12 \overline{) 6564}$$

$$\begin{array}{r} 547 \\ -60 \downarrow \\ \hline 456 \\ -48 \downarrow \\ \hline 84 \\ -84 \\ \hline 0 \end{array}$$

$$20. \quad 31 \overline{) 8525}$$

$$\begin{array}{r} 275 \\ -62 \downarrow \\ \hline 232 \\ -217 \downarrow \\ \hline 155 \\ -155 \\ \hline 0 \end{array}$$

Solve the following word problems. Show all your work and circle your answer.
(Remember to put a label on your answer!)

21. A cargo ship has 15 compartments in the hull. If each compartment can hold 925 King Crabs, how many total crabs can the cargo ship hold?

$$\begin{array}{r} 925 \\ \times 15 \\ \hline \end{array} = 13,875 \text{ crabs}$$

22. A farmer has 77 peach trees in his orchard. Each tree produces 500 peaches each season. How many total peaches does the farmer's trees produce each season?

$$\begin{array}{r} 500 \\ \times 77 \\ \hline \end{array} = 38,500 \text{ peaches}$$

23. In one year, a computer repair technician makes 1044 repairs to his customers computers. Since there are 12 months in one year, how many repairs does he make each month?

$$12 \overline{) 1044} = 87 \text{ repairs per month}$$

24. Amy bought 426 bottles of water when they were on sale. If she drank 3 bottles a day, how many days would they last?

$$3 \overline{) 426} = 142 \text{ days}$$