

Division Tip Sheet

Division Tips - Dividing By One

This one's **a cinch**. You wanna divide [a number](#) by one, do you? Easy. Take the number - say 1,372 - and that's it. **That's your answer.** $429 \div 1 = 429$. $11 \div 1 = 11$. $1,000,000 \div 1 = 1,000,000$. And you thought this was hard? Phhhh.

Division Tips - Dividing By Two

When you divide something by two, you simply [cut it in half](#). Half of 234 is 117, therefore $234 \div 2 = 117$. Let's try a smaller number: $20 \div 2 = 10$. Why? Because half of 20 is 10. If the number you're trying to divide is odd (like, say, 33), then you **can't divide it** evenly by two. Easy peasy.

Division Tips - Dividing By Three

Wanna know if you can **divide a number** evenly by three? Just add up all the digits until you have a [single](#) number. If THAT number is divisible by three, so is the original number. Case in point: 8787. If you add $8+7+8+7$ you get 30. Then add $3+0$, which equals three. Three is definitely **divisible by three**, so you know that 8787 is too.

Division Tips - Dividing By Four

The rule for dividing by four is **the same** as for dividing by two - only you have to do it **twice**. If you want to divide 88 by 4, you simply halve 88 (which is 44) and then halve that number (which, in this case, is 22). $12 \div 4$? Half of 12 is six and half of six is three - so your [answer](#) is three.

Division Tips - Dividing By Five

If you want to know whether a number can be **evenly divided** by five you just need to look at the number's **last digit**. If the last digit is a zero or a five, then the number is divisible by five. 1,573,740 ends in [zero](#) so it is divisible by five. Since 23 ends in three, it isn't divisible by five.

Division Tips - Dividing By Six

If a number is **BOTH** divisible by three (see the three rule) **AND** an even number (ending in 0, 2, 4, 6 or 8) then it is divisible by six too. 312 is an even number and if you **add up all the digits** they equal six, which is divisible by three. Therefore 312 is divisible by six.

Division Tips - Dividing By Seven

To find out if a number is divisible by seven, take the last digit, **double it**, and subtract it from the rest of the number. "Huh?" you

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may be saying. Check out this example: If you had 203, you would [double](#) the last digit (three) to get six, and **subtract** that from 20 (the remaining amount) to get 14. Since 14 is divisible by seven, 203 is too.

Division Tips - Dividing By Eight

This brings us back to the **old halving trick** we used with two and four. Try halving four times to [get the answer](#) to this one. Want an example? Okay. $64 \div 8$. Half of 64 is 32 and half of 32 is 16, then half of 16 is 8. Therefore $64 \div 8 = 8$.

Division Tips - Dividing By Nine

Use the **same trick** we used to see if a number is divisible by three - it works for any power of three (3,6,9,12, etc.).

Division Tips - Dividing By Ten

If a number is evenly divisible by 10 it will end in zero. Simply remove that zero to find out what that number would be if it were divided by 10. Example: $370 \div 10 = 37$ (which is 370 with the "0" taken off the end). $50 \div 10 = 5$. See the [pattern](#) here?