

5th Grade Assignment – Week #13

Group Assignment: Discovery!

For Tuesday: **Finding Remainders**

You only need to give the remainder for each of the below division problems. You could divide (long division, perhaps) to figure out each one. But if you see the trick, then you don't have to divide.

Dividing by 5

Example: $29 \div 5$
remainder is 4

- 1) $18 \div 5$
- 2) $42 \div 5$
- 3) $91 \div 5$
- 4) $86 \div 5$
- 5) $7,481 \div 5$
- 6) $34,876 \div 5$
- 7) $74,820 \div 5$
- 8) $186,539 \div 5$

Dividing by 4

Example: $33 \div 4$
remainder is 1

- 9) $37 \div 4$
- 10) $137 \div 4$
- 11) $537 \div 4$
- 12) $237,637 \div 4$
- 13) $83 \div 4$
- 14) $783 \div 4$
- 15) $2,392 \div 4$
- 16) $186,542 \div 4$

Dividing by 9

Example: $48 \div 9$
remainder is 3

- 17) $32 \div 9$
- 18) $41 \div 9$
- 19) $62 \div 9$
- 20) $53 \div 9$
- 21) $231 \div 9$
- 22) $503 \div 9$
- 23) $718 \div 9$
- 24) $186,539 \div 9$

For Thursday: **Puzzles!** See how many of these you can do:

- 1) If Christine takes her favorite number, subtracts 6, and multiplies by 5, she ends up with 35. What is Christine's favorite number?
- 2) If Billy doubles his favorite number and subtracts 5, he ends up with 57. What is his favorite number?
- 3) If George divides his favorite number by 3 and multiplies it by 5, he gets 85. What is his favorite number?
- 4) If Jay adds 16 to his favorite number, cuts it in half, divides by 5, and subtracts 2, the result is 1. What is his favorite number?
- 5) *Challenge!* If Lucy takes her favorite number, multiplies it times itself, subtracts 4, divides by 12, adds 6, and multiplies by 7, she ends up with 77. What is Lucy's favorite number?

Individual Work

Division with Zeroes. Do each of the following problems

- | | | |
|------------------------|------------------------------|----------------------------|
| 1. $45 \div 5$ | 8. $42 \div 6$ | 15. $2500 \div 50$ |
| 2. $450 \div 5$ | 9. $4200 \div 600$ | 16. $44,000 \div 1100$ |
| 3. $4500 \div 5$ | 10. $4,200,000 \div 600,000$ | 17. $540,000 \div 600$ |
| 4. $45,000,000 \div 5$ | 11. $56 \div 8$ | 18. $3,600,000 \div 4000$ |
| 5. $630 \div 9$ | 12. $560 \div 80$ | 19. $720,000 \div 80$ |
| 6. $3200 \div 4$ | 13. $560,000 \div 80,000$ | 20. $30,000 \div 500$ |
| 7. $480,000 \div 12$ | 14. $2400 \div 300$ | 21. $270,000,000 \div 300$ |

Fact Families. With each problem, first do the calculation, and then also give the three other facts in the fact family.

22. $13 + 8$
23. $800 - 43$
24. $100 \div 25$
25. 35×62

Divisibility. With each number, state whether it is divisible by 2, 3, 4, 5, 9, or 10.

26. 752,532
27. 94,626,810
28. 7,238,553,476