

Adding Fractions with Different Denominators: Serving Salsa

| Scene # | Description | Narration |
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| 1 | A CHEF IS IN A KITCHEN MAKING SALSA. THE EQUATION $\frac{1}{3}$ CUP PLUS $\frac{1}{4}$ CUP IS ON THE SCREEN. | <p>THIS CHEF IS MAKING SALSA FOR 20 PEOPLE. HE THOUGHT HE HAD JUST ENOUGH TO SERVE EACH PERSON $\frac{1}{3}$ OF A CUP WITH THEIR DINNERS. BUT HE ACTUALLY HAS ENOUGH TO GIVE EACH PERSON $\frac{1}{4}$ CUP MORE.</p> <p>SO, IF HE GIVES EACH PERSON $\frac{1}{3}$ CUP PLUS $\frac{1}{4}$ CUP, HOW MUCH SALSA IS HE GIVING EACH PERSON? THESE FRACTIONS HAVE DIFFERENT DENOMINATORS. TO ADD THEM, WE HAVE TO MAKE THE DENOMINATORS THE SAME, SO WE'RE ADDING THE SAME-SIZED PORTIONS TO ONE ANOTHER.</p> |
| 2 | THE CHEF IS SCOOPING SALSA INTO BOWLS. THE MULTIPLES OF 3 AND 4 ARE ON THE SCREEN. 12 IS BLINKING IN RED AMONG BOTH LISTS OF MULTIPLES. | TO FIND A COMMON DENOMINATOR FOR $\frac{1}{3}$ AND $\frac{1}{4}$, WE NEED TO FIND A NUMBER THAT IS A MULTIPLE BOTH OF 3 AND 4 -- A COMMON MULTIPLE. LET'S LOOK AT THE MULTIPLES OF 3 AND 4. NOTICE THAT 12 IS A COMMON MULTIPLE. WE CAN USE THAT AS A COMMON DENOMINATOR. SO IS 24, BUT WE DON'T NEED TO USE IT WHEN WE HAVE A LESSER ONE. |
| 3 | 3×4 IS ON THE SCREEN. THE NUMBERS CHANGE TO $\frac{1}{3}$ AND $\frac{1}{4}$ AND $?\frac{12}{12}$. | NOTICE THAT 12 IS ALSO 3 TIMES 4. THE PRODUCT OF TWO NUMBERS IS ALWAYS A COMMON MULTIPLE BECAUSE WE GOT IT BY MULTIPLYING THE TWO OF THEM. SO, HOW DO WE CONVERT THIRDS AND FOURTHS TO TWELFTHS? |
| 4 | AS THE NARRATOR DESCRIBES THE PROBLEM THE STEPS TO ADDING THE FRACTIONS APPEAR ON THE SCREEN. | FOR EACH FRACTION, MULTIPLY BOTH THE NUMERATOR AND DENOMINATOR BY A NUMBER THAT RESULTS IN 12, THE COMMON MULTIPLE, IN THE DENOMINATOR. FOR THIRDS, IT'S 4 - 1 TIMES 4 IS 4. 3 TIMES 4 IS 12. FOR FOURTHS, IT'S 3. 1 TIMES 3 IS 3, AND 4 TIMES 3 IS 12. $\frac{3}{12}$ PLUS $\frac{4}{12}$ IS $\frac{7}{12}$. SO EACH PERSON RECEIVES $\frac{7}{12}$ CUP OF SALSA. |