

A20 Fraction Review

Key

Simplify. Show all work. Express all answers in lowest terms.

1. $\frac{1}{3} \cdot (-\frac{1}{4})$

$(-\frac{1}{12})$

multiply across
top and bottom

6. $-\frac{2}{5} \div \frac{4}{25} = -\frac{2}{5} \cdot \frac{25}{4}$

$\frac{5}{2} = 2\frac{1}{2}$

2. $\frac{3}{11} \cdot \frac{5}{9}$

$(\frac{15}{99})$

$(\frac{5}{33})$

7. $\frac{7}{10} \div (-\frac{4}{5}) = \frac{7}{10} \cdot \frac{5}{4}$

$-\frac{35}{40}$

$(-\frac{7}{8})$

3. $\frac{5}{144} \cdot 4$

$\frac{5}{4} = 1\frac{1}{4}$

8. $-7\frac{1}{3} \div 2\frac{1}{5} = -\frac{22}{3} \cdot \frac{5}{11}$

$-\frac{10}{3} = 3\frac{1}{3}$

4. $-12\frac{2}{3} \cdot 7\frac{1}{2}$

$-\frac{38}{3} \cdot \frac{15}{2} = -95$

(-95)

9. $-\frac{3}{11} \div \frac{6}{22} = -\frac{3}{11} \cdot \frac{22}{6}$

(-1)

5. $3\frac{1}{3} \cdot 9\frac{3}{4}$

$\frac{10}{3} \cdot \frac{39}{4} = \frac{65}{2}$

$(32\frac{1}{2})$

10. $\frac{5}{6} + \frac{5}{6} = \frac{10}{6} = \frac{5}{3}$

$(1\frac{2}{3})$

$$11. 26\frac{7}{12} + 11\frac{11}{12}$$

$$37\frac{18}{12} = 38\frac{1}{2}$$

$$17. 12\frac{1}{3} - \frac{3}{5} = 12\frac{5}{15} - \frac{9}{15}$$

$$11\frac{20}{15} - \frac{9}{15} = 11\frac{11}{15}$$

$$12. \frac{a}{4} + \frac{4a}{4}$$

$$\frac{5a}{4}$$

$$18. \frac{3x}{5} + \frac{2x}{15} = \frac{9x}{15} + \frac{2x}{15}$$

$$\frac{11x}{15}$$

$$13. \frac{7c}{14} + \frac{7c}{14} \text{ reduce!}$$

$$\frac{14c}{14} = \frac{7c}{8}$$

$$19. \frac{11x}{12} + \left(+\frac{5x}{12}\right) = \frac{16x}{12}$$

$$\frac{4x}{3}$$

$$14. \frac{1}{2} + \left(-\frac{3}{10}\right)$$

$$\frac{5}{10} - \frac{3}{10} = \frac{2}{10} = \frac{1}{5}$$

$$20. \frac{4}{3x} - \frac{11}{x} = \frac{4}{3x} - \frac{33}{3x}$$

$$-\frac{29}{3x}$$

no mixed numbers!

$$15. -\frac{3}{8} + \frac{1}{6}$$

$$-\frac{9}{24} + \frac{4}{24} = -\frac{5}{24}$$

$$16. -7\frac{1}{2} + \frac{3}{4}$$

$$-6\frac{5}{4} + \frac{3}{4}$$

$$-6\frac{3}{4}$$