# Grade 8 Review - Fractions

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## Outcome N6 - Fractions

- Simplify and state final solutions in lowest terms.
- Rewrite final solutions as mixed numbers, if possible.

1) Multiply each of the following:

   a) $6 \times \dfrac{1}{3}$

   b) $10 \times \dfrac{1}{2}$

   c) $\dfrac{5}{9} \times 9$

   d) $\dfrac{1}{8} \times 12$

   e) $\dfrac{6}{9} \times \dfrac{1}{3}$

   f) $\dfrac{8}{7} \times \dfrac{13}{12}$

   g) $\dfrac{1}{2} \times 2\dfrac{1}{8}$

   h) $3\dfrac{1}{4} \times \dfrac{7}{8}$

   i) $2\dfrac{1}{3} \times 5\dfrac{2}{5}$

   j) $4\dfrac{1}{3} \times 1\dfrac{7}{8}$

2) Divide each of the following:

   a) $6 \div \dfrac{1}{2}$

   b) $2 \div \dfrac{3}{8}$

   c) $\dfrac{3}{4} \div 4$

   d) $\dfrac{1}{5} \div 7$

   e) $\dfrac{2}{3} \div \dfrac{5}{6}$

   f) $\dfrac{7}{12} \div \dfrac{3}{4}$

   g) $8 \div 1\dfrac{5}{6}$

   h) $5\dfrac{7}{8} \div 4$

   i) $2\dfrac{3}{4} \div 1\dfrac{1}{8}$

   j) $5\dfrac{2}{5} \div 1\dfrac{9}{10}$

3) Simplify each of the following:

a) $\dfrac{2}{5} \div \left( \dfrac{1}{3} + \dfrac{3}{2} \right)$

b) $\left( 6 - \dfrac{3}{2} \right) \times \dfrac{5}{3}$

c) $\dfrac{3}{4} \times \dfrac{8}{9} - \dfrac{1}{9} \div \dfrac{2}{3}$

d) $2\dfrac{2}{3} - 1\dfrac{1}{2} \div \left( 4\dfrac{2}{3} + \dfrac{1}{3} \right)$

4) Mrs. Coe needs to make 16 costumes for the school play. Each costume requires $2\dfrac{1}{4}$ yards of material. How many yards of material will she need?

5) Mr. Fast is going to serve $\dfrac{1}{3}$ of a whole pizza to each guest at his Halloween party. If he expects 24 guests, how many pizzas will he need?

6) A stack of boards is 21 inches high. Each board is $1\dfrac{3}{4}$ inches thick. How many boards are there?

7) Mrs. Forfar baked 9 pies that weight $20\dfrac{1}{4}$ pounds total. How much does each pie weigh?

8) Super Mart had a sale. The first $200 Sara's father spent was discounted by $\dfrac{1}{10}$, and the amount he spent over $200 was discounted by $\dfrac{1}{5}$. Sara's father bought $275 worth of groceries. What was the total discount?

9) In Mr. Trudel's grade 8 class 20 students, or $\dfrac{5}{7}$ of the class, bought class photos. In Ms. Chester's grade 8 class 18 students, or $\dfrac{2}{3}$ of the class, bought class photos. How many students were there in total in Mr. Trudel's and Ms. Chester's classes?