



ورقة عمل رقم 8
المبحث : الرياضيات
المستوى : الخامس



مدراس الكتبة العلمية الإسلامية

الشعبة : ()	الوحدة الرابعة : الكسور والعمليات عليها	اسم الطالب
الدرس : جمع وطرح وضرب وقسمة الكسور		اليوم / التاريخ : 2025 / 11 /

اكتب كل كسر غير فعلي في صورة عدد كسري :

$\frac{8}{5} = 1\frac{3}{5}$	$\frac{18}{7} = 2\frac{4}{7}$	$\frac{37}{9} = 4\frac{1}{9}$	$\frac{54}{8} = 6\frac{6}{8}$
$\frac{32}{9} = 3\frac{5}{9}$	$\frac{36}{6} = 6$	$\frac{26}{8} = 3\frac{2}{8}$	$\frac{127}{5} = 25\frac{2}{5}$

اكتب كل عدد كسري في صورة كسر فعلي :

$4\frac{2}{5} = \frac{22}{5}$	$5\frac{3}{8} = \frac{43}{8}$	$6\frac{3}{5} = \frac{33}{5}$	$7\frac{3}{4} = \frac{31}{4}$
$9\frac{1}{10} = \frac{21}{10}$	$16\frac{1}{2} = \frac{33}{2}$	$5\frac{6}{7} = \frac{41}{7}$	$12\frac{5}{9} = \frac{113}{9}$

أجد مقلوب كل عدد معكاني :

$\frac{1}{7} \Rightarrow \frac{7}{1} = 7$	$\frac{11}{12} \Rightarrow \frac{12}{11} = 1\frac{1}{11}$	$\frac{8}{1} \Rightarrow \frac{1}{8}$	$\frac{15}{1} \Rightarrow \frac{1}{15}$	$\frac{1}{12} \Rightarrow 12$
$2\frac{3}{4} = \frac{11}{4} \Rightarrow \frac{4}{11}$	$2\frac{1}{4} = \frac{9}{4} \Rightarrow \frac{4}{9}$	$1\frac{7}{8} = \frac{15}{8} \Rightarrow \frac{8}{15}$	$3\frac{3}{4} = \frac{15}{4} \Rightarrow \frac{4}{15}$	$\frac{9}{10} \Rightarrow \frac{10}{9} = 1\frac{1}{9}$

اكتب كل كسر مما يأتي بأبسط صورة

1. $\frac{3}{12} = \frac{\cancel{3}}{\cancel{3} \times 2 \times 2} = \boxed{\frac{1}{4}}$ 2. $\frac{6}{18} = \frac{\cancel{2} \times \cancel{3}}{\cancel{2} \times \cancel{3} \times 3} = \boxed{\frac{1}{3}}$ 3. $\frac{8}{10} = \frac{\cancel{2} \times \cancel{2} \times 2}{\cancel{2} \times 5} = \boxed{\frac{4}{5}}$ 4. $\frac{14}{21} = \frac{\cancel{7} \times 2}{\cancel{3} \times \cancel{7}} = \boxed{\frac{2}{3}}$

5. $\frac{9}{15} = \frac{2 \times 3}{2 \times 5} = \frac{3}{5}$ 6. $\frac{8}{14} = \frac{2 \times 2 \times 2}{2 \times 7} = \frac{4}{7}$ 7. $\frac{20}{25} = \frac{2 \times 2 \times 5}{5 \times 5} = \frac{4}{5}$ 8. $\frac{10}{12} = \frac{2 \times 5}{2 \times 2 \times 3} = \frac{5}{6}$

9. $\frac{8}{20} = \frac{2 \times 2 \times 2}{2 \times 2 \times 5} = \frac{2}{5}$ 10. $\frac{12}{16} = \frac{2 \times 2 \times 3}{2 \times 2 \times 2 \times 2} = \frac{3}{4}$ 11. $\frac{20}{45} = \frac{2 \times 2 \times 5}{3 \times 3 \times 5} = \frac{4}{9}$ 12. $\frac{6}{16} = \frac{2 \times 3}{2 \times 2 \times 2 \times 2} = \frac{3}{8}$

أَجِدُ النَّاتِجَ فِي كُلِّ مَعْنَايُنِي فِي أَبْسْطُ صَوْرَةٍ: * نَوْحِيَّةٌ مُعَامَلَاتٍ ← سَطْحٌ + سَطْحٌ ← (مَبْطُونَةٌ) (بَابِطُ صَوْرَةٍ) *

$$\frac{3}{8} + \frac{1}{2}$$

$$\frac{3}{8} + \frac{4}{8} = \boxed{\frac{7}{8}}$$

$$\frac{7}{9} - \frac{2}{3} \times 3$$

$$\frac{7}{9} - \frac{6}{9} = \frac{1}{9}$$

$$\frac{1}{2} \times \frac{3}{4} = \frac{1 \times 3}{2 \times 2} = \frac{3}{8}$$

$$\frac{6}{1} \times \frac{2}{3} = \frac{\cancel{2} \times 3 \times 2}{1 \times \cancel{3}} = \frac{4}{1} = 4$$

$$\frac{5}{1} \div \frac{2}{3}$$

$$\frac{5}{1} \times \frac{3}{2} = \frac{15}{2} = 7\frac{1}{2}$$

$$\frac{1}{2} \div \frac{4}{5}$$

$$\frac{1}{2} \times \frac{5}{4} = \frac{5}{8}$$

$$\frac{47}{50} - \frac{3}{10} \times 5$$

$$\frac{47}{50} - \frac{15}{50} = \frac{32}{50} = \frac{2 \times 2 \times 2 \times 2}{2 \times 5 \times 5}$$

$$2 \frac{3}{5} + \frac{9}{10} = 2 \frac{1}{2}$$

$$\frac{6}{10} + \frac{9}{10} = \frac{15}{10} = \frac{3 \times 5}{2 \times 5} = \frac{3}{2} = 1\frac{1}{2}$$

$$\frac{16}{25}$$

المسألة -> اقلب -> انقلب -> ثبت
 الضرب :- تحليل واختصار -> ضرب

$$10 \div 3 \frac{2}{3}$$

$$9 \frac{3}{3} - 3 \frac{2}{3} = 6 \frac{1}{3}$$

$$\frac{3}{10} \div \frac{9}{10}$$

$$\frac{3}{10} \times \frac{10}{9} = \frac{\cancel{3} \times \cancel{10} \times 5}{\cancel{2} \times \cancel{5} \times \cancel{3} \times 3} = \frac{1}{3}$$

$$\frac{3}{5} \div \frac{6}{1}$$

$$\frac{3}{5} \times \frac{1}{6} = \frac{\cancel{3} \times 1}{5 \times \cancel{2} \times 3} = \frac{1}{10}$$

$$8 \frac{5}{6} - 3 \frac{1 \times 2}{3 \times 2} = 5 \frac{1}{2}$$

$$\frac{5}{6} - \frac{2}{6} = \frac{3}{6} = \frac{1}{2}$$

$$\frac{2}{3} \times 18 = \frac{2 \times \cancel{2} \times \cancel{2} \times 3}{\cancel{3} \times 1} = 12$$

$$5 \div \frac{3}{4} = \frac{5}{1} \times \frac{4}{3} = \frac{20}{3} = 6 \frac{2}{3}$$

$$5 - 2 \frac{1}{3} = 4 \frac{3}{3} - 2 \frac{1}{3} = 2 \frac{2}{3}$$

$$4 \frac{8}{15} + 3 \frac{1 \times 5}{3 \times 5} = 7 \frac{13}{15}$$

$$\frac{8}{15} + \frac{5}{15} = \frac{13}{15}$$

$$\frac{2}{1} \times \frac{1}{6} = \frac{\cancel{2} \times 1}{\cancel{2} \times 3} = \frac{1}{3}$$

$$12 \div 1 \frac{2}{3} = \frac{12}{1} \div \frac{5}{3} = \frac{12}{1} \times \frac{3}{5} = \frac{36}{5} = 7 \frac{1}{5}$$

$$\frac{9}{8} \times \frac{2}{3} = \frac{\cancel{3} \times \cancel{2} \times 3}{2 \times \cancel{2} \times \cancel{3}} = \frac{3}{4}$$

$$1 \frac{3}{4} \times 1 \frac{1}{2} = \frac{7}{4} \times \frac{3}{2} = \frac{21}{8} = 2 \frac{5}{8}$$

$$2\frac{1}{3} \times \frac{3}{5}$$

$$\frac{7}{3} \times \frac{3}{5} = \frac{7}{5} = 1\frac{2}{5}$$

$$16 \div 2\frac{2}{3}$$

$$\frac{16}{1} \div \frac{8}{3} = \frac{16}{1} \times \frac{3}{8} = \frac{2 \times 2 \times 2 \times 2 \times 3}{2 \times 2 \times 2} = 6$$

$$16 \div 2\frac{2}{3}$$

$$\frac{16}{1}$$

$$3\frac{1}{2} \div 4$$

$$\frac{7}{2} \div \frac{4}{1} = \frac{7}{2} \times \frac{1}{4} = \frac{7}{8}$$

$$9\frac{2}{3} + 4\frac{7}{9} = 13\frac{4}{9} = 13\frac{4}{9}$$

$$\frac{6}{9} + \frac{7}{9} = \frac{13}{9} = 1\frac{4}{9}$$

$$5\frac{1}{3}$$

$$10 \times 6\frac{1}{2}$$

$$\frac{10}{1} \times \frac{13}{2} = \frac{2 \times 5 \times 13}{2} = 65$$

$$40 \div 4\frac{4}{5}$$

$$\frac{40}{1} \div \frac{24}{5}$$

$$\frac{40}{1} \times \frac{5}{24} = \frac{2 \times 2 \times 2 \times 2 \times 5 \times 5}{2 \times 2 \times 2 \times 3} = \frac{25}{3} = 8\frac{1}{3}$$

$$8 \times 7\frac{1}{4}$$

$$\frac{8}{1} \times \frac{29}{4} = \frac{2 \times 2 \times 2 \times 2 \times 29}{2 \times 2} = 58$$

$$\frac{2}{5} \div \frac{4}{1}$$

$$\frac{2}{5} \times \frac{1}{4} = \frac{2 \times 1}{5 \times 2 \times 2} = \frac{1}{10}$$

$$6\frac{5}{12} + 3\frac{3}{4}$$

$$9\frac{1}{6} = 10\frac{1}{6}$$

$$\frac{5}{12} + \frac{9}{12} = \frac{14}{12} = \frac{7}{6} = 1\frac{1}{6}$$

$$1\frac{1}{6}$$

النتائج المتوقعة : (1) جد مقلوب العدد (2) جد قسمة كسر على كسر (3) جد قسمة عدد كلي على كسر
س1: جد مقلوب كل مما يلي : (البسط مقام والمقام بسط)

$$a) \frac{3}{7} \Rightarrow \frac{7}{3} = 2\frac{1}{3}$$

$$b) \frac{15}{2} \Rightarrow \frac{2}{15}$$

$$c) \frac{1}{14} \Rightarrow \frac{14}{1} = 14$$

$$d) \frac{98}{1} \Rightarrow \frac{1}{98}$$

س1: جد ناتج القسمة في كل مما يلي بأبسط صورة : (اقلب $\Rightarrow$ اضرب $\Rightarrow$ ثبت)

$$a) \frac{3}{7} \div \frac{9}{11} =$$

$$\frac{3}{7} \times \frac{11}{9} = \frac{\cancel{3} \times 11}{7 \times \cancel{3} \times 3} = \frac{11}{21}$$

$$b) \frac{15}{2} \div \frac{5}{7} =$$

$$\frac{15}{2} \times \frac{7}{5} = \frac{3 \times \cancel{5} \times 7}{2 \times \cancel{5}} = \frac{21}{2} = 10\frac{1}{2}$$

$$c) \frac{5}{6} \div \frac{15}{1} =$$

$$\frac{5}{6} \times \frac{1}{15} = \frac{\cancel{5} \times 1}{2 \times 3 \times \cancel{3} \times 5} = \frac{1}{18}$$

$$d) \frac{12}{1} \div \frac{6}{11} =$$

$$\frac{12}{1} \times \frac{11}{6} = \frac{2 \times \cancel{2} \times \cancel{3} \times 11}{\cancel{2} \times \cancel{3}} = \frac{22}{1} = 22$$

س1: جد ناتج القسمة في كل مما يلي بأبسط صورة : (حول العدد الكسري الى كسر) ثم
(اقلب $\Rightarrow$ اضرب $\Rightarrow$ ثبت)

$$a) 5\frac{1}{3} \div \frac{7}{6} =$$

$$\frac{16}{3} \div \frac{7}{6} = \frac{16}{3} \times \frac{6}{7} = \frac{2 \times 2 \times 2 \times 2 \times \cancel{3}}{\cancel{3} \times 7} = \frac{32}{7} = 4\frac{4}{7}$$

$$b) \frac{1}{4} \div 10\frac{1}{8} =$$

$$\frac{1}{4} \div \frac{81}{8} = \frac{1}{4} \times \frac{8}{81} = \frac{1 \times \cancel{2} \times \cancel{2} \times 2}{2 \times 2 \times 3 \times 3 \times 3 \times 3} = \frac{2}{81}$$