كتاب الطالب :

جمع الكسور وطرحها

أجد ناتج كلّ ممّا يأتي في أبسط صورة:

(1) $\frac{1}{2} + \frac{7}{9}$

$$\frac{1 \times 9}{2 \times 9} + \frac{7 \times 2}{9 \times 2} = \frac{9}{18} + \frac{14}{18} = \frac{9 + 14}{18} = \frac{23}{18}$$

(2) $\frac{19}{21} - \frac{5}{6}$

$$\frac{19 \times 2}{21 \times 2} - \frac{5 \times 7}{6 \times 7} = \frac{38}{42} - \frac{35}{42} = \frac{38 - 35}{42} = \frac{3}{42}$$

(3) $\frac{7}{12} - \frac{4}{9}$

$$\frac{7 \times 3}{12 \times 3} - \frac{4 \times 4}{9 \times 4} = \frac{21}{36} - \frac{16}{36} = \frac{21 - 16}{36} = \frac{5}{36}$$

(4) $\frac{3}{4} + \frac{3}{10}$

$$\frac{3 \times 5}{4 \times 5} + \frac{3 \times 2}{10 \times 2} = \frac{15}{20} + \frac{6}{20} = \frac{15 + 6}{20} = \frac{21}{20} = 1\frac{1}{20}$$

(5) $\frac{11}{28} - \frac{3}{8}$

$$\frac{11 \times 2}{28 \times 2} - \frac{3 \times 7}{8 \times 7} = \frac{22}{56} - \frac{21}{56} = \frac{22 - 21}{56} = \frac{1}{56}$$

(6) $\frac{5}{6} + \frac{1}{4}$

$$\frac{5 \times 2}{6 \times 2} + \frac{1 \times 3}{4 \times 3} = \frac{10}{12} + \frac{3}{12} = \frac{10 + 3}{12} = \frac{13}{12} = 1\frac{1}{12}$$

جمع الأعداد الكسرية وطرحها

أجد ناتج كلّ ممّا يأتي في أبسط صورة:

(1) $1\frac{1}{6}+2\frac{3}{8}$

$$1\frac{1}{6}+2\frac{3}{8}=3\frac{13}{24}$$

(2) $2\frac{1}{14}-\frac{3}{4}$

$$2\frac{1}{14}-\frac{3}{4}=1\frac{9}{28}$$

(3) $32\frac{1}{2}-15\frac{16}{17}$

$$32\frac{1}{2}-15\frac{16}{17}=16\frac{19}{34}$$

(4) $9\frac{1}{8}+\frac{3}{10}$

$$9\frac{1}{8}+\frac{3}{10}=9\frac{17}{40}$$

(5) $3\frac{2}{9}-2\frac{1}{12}$

$$3\frac{2}{9}-2\frac{1}{12}=1\frac{5}{36}$$

(6) $20-8\frac{1}{3}$

$$19\frac{3}{3}-8\frac{1}{3}=11\frac{2}{3}$$

ضرب الاعداد الكسرية

السؤال 9 +10

أَجِدُ مِساحَةَ كُلٍّ مِنَ الْمُسْتَطيلَيْنِ الْآتِيَيْنِ:

9 $3\frac{4}{5}$ km, $1\frac{7}{8}$ km

10 $2\frac{1}{3}$ m, $\frac{6}{7}$ m

مساحة المستطيل = الطول × العرض

$A = L \times W$

الطول × العرض

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

$A = \frac{(5\times3)+4}{5} \times \frac{(8\times1)+7}{8}$

$A = \frac{15+4}{5} \times \frac{8+7}{8}$

$A = \frac{19}{5} \times \frac{15}{8} = \frac{19\times3}{1\times8} = \frac{57}{8} = 7\frac{1}{8}\ km^2$

الدرس 3 ضرب الأعداد الكسرية

أَجِدُ مِساحَةَ كُلٍّ مِنَ الْمُسْتَطيلَيْنِ الْآتِيَيْنِ:

9 $3\frac{4}{5}$ km, $1\frac{7}{8}$ km

10 $2\frac{1}{3}$ m, $\frac{6}{7}$ m

مساحة المستطيل = الطول × العرض

$A = L \times W$

الطول × العرض

(10) $A = L \times W$

$A = 2\frac{1}{3} \times \frac{6}{7}$

$A = \frac{(2\times2)+1}{3} \times \frac{6}{7}$

$A = \frac{6+1}{3} \times \frac{6}{7}$

$A = \frac{7}{3} \times \frac{6}{7} = 2\ m^2$

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

$\frac{(4\times1)+3}{4} \times \frac{(7\times5)+1}{7} =$

$\frac{4+3}{4} \times \frac{35+1}{7} =$

$\frac{7}{4} \times \frac{36}{7} = \frac{9}{1} = 9$

② $\frac{5}{12} \times 2\frac{5}{8} =$

$\frac{5}{12} \times \frac{(8\times2)+5}{8} =$

$\frac{5}{12} \times \frac{16+5}{8}$

$\frac{5}{12} \times \frac{21}{8} = \frac{5\times7}{4\times8} = \frac{35}{32} = 1\frac{3}{32}$

$12 = 3\times4$

$21 = 3\times7$

③ $7\frac{1}{5} \times \frac{5}{8}$

$\frac{(5\times7)+1}{5} \times \frac{5}{8} =$

$\frac{35+1}{5} \times \frac{5}{8} =$

$\frac{36}{5} \times \frac{5}{8} = \frac{9\times1}{1\times2} = \frac{9}{2} = 4\frac{1}{2}$

$8 = 4\times2$

$36 = 4\times9$

④ $3\frac{1}{2} \times 1\frac{1}{7}$

$\frac{(2\times3)+1}{2} \times \frac{(7\times1)+1}{7}$

$\frac{6+1}{2} \times \frac{7+1}{7}$

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

⑤ $10 \times 8\frac{3}{8} =$

$10 \times \frac{(8\times8)+3}{8}$

$10 \times \frac{64+3}{8}$

$\frac{10}{1} \times \frac{67}{8} = \frac{5\times67}{4} = \frac{335}{4} = 83\frac{3}{4}$

$335 \div 4 = 83$, -32, 15, -12, 3

⑥ $2\frac{5}{11} \times 33 =$

$\frac{(11\times2)+5}{11} \times 33$

$\frac{22+5}{11} \times 33$

$\frac{27}{11} \times 33 = 81$

⑦ $\frac{40}{1} \times \frac{11}{32} = \frac{5\times11}{1\times4}$

$\frac{55}{4} = 13\frac{3}{4}$

$40 = 8\times5$

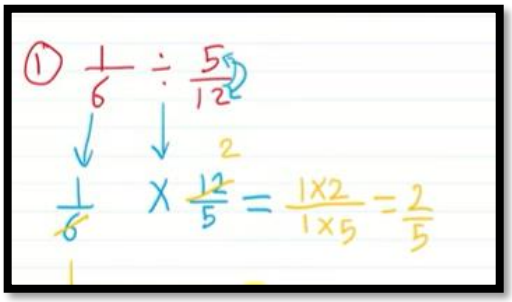
$32 = 8\times4$

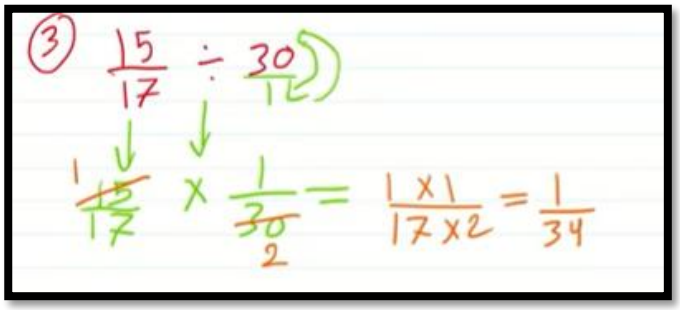
⑧ $\frac{1}{81} \times \frac{54}{1} = \frac{1\times6}{9\times1} = \frac{2}{3}$

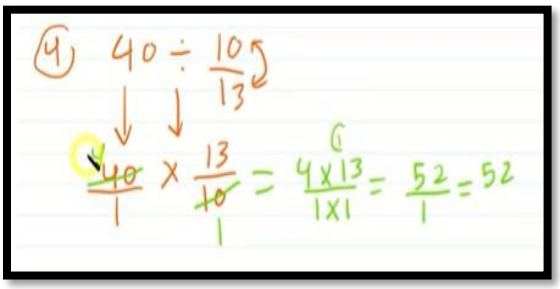
$81 = 9\times9$

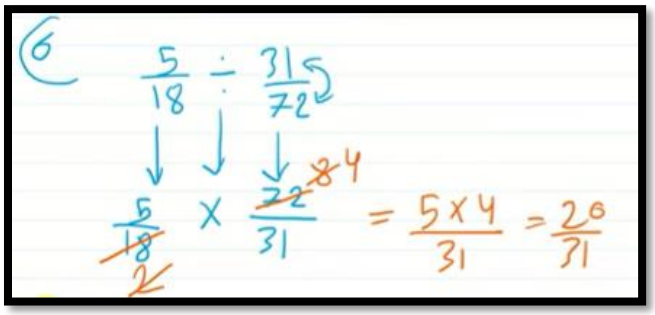
$54 = 9\times6$

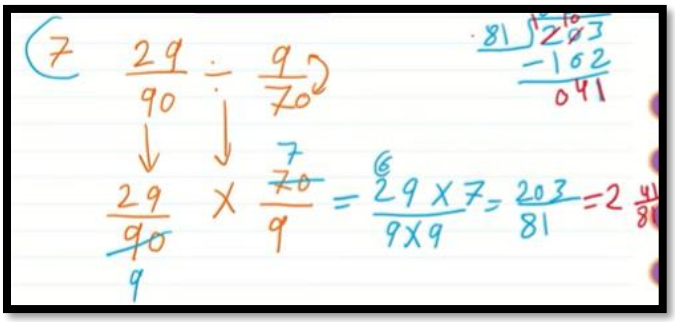
قسمة الكسورو الاعداد الكسرية صفحة 60+ 64 :

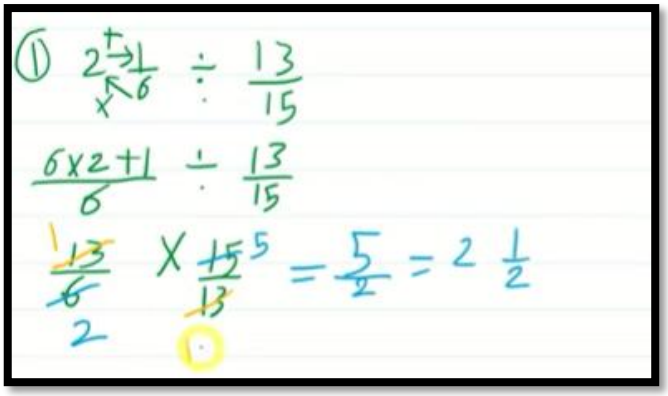


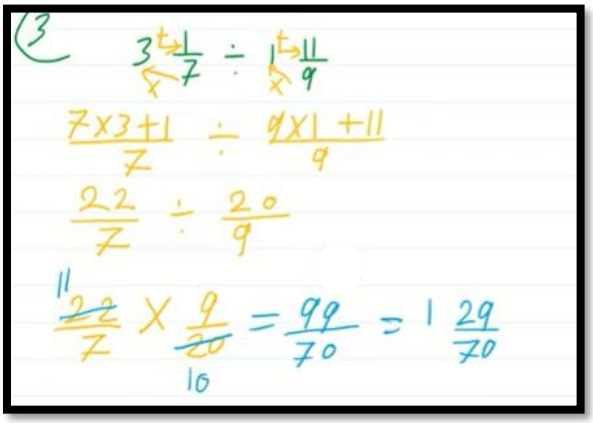












(4) $10\frac{2}{3} \div 8$

$\frac{3 \times 10 + 2}{3} \div 8$

$\frac{32}{3} \div \frac{8}{1}$

$\frac{32}{3} \times \frac{1}{8} = \frac{4}{3} = 1\frac{1}{3}$

(5) $42 \div 2\frac{2}{13}$

$42 \div \frac{13 \times 2 + 2}{13}$

$42 \div \frac{26 + 2}{13}$

$42 \div \frac{28}{13}$

$\frac{42}{1} \times \frac{13}{28} = \frac{39}{2} = 19\frac{1}{2}$

19
2 | 39
−2
19
−18
1

(6) $30\frac{2}{3} \div 1\frac{1}{3}$

$\frac{3 \times 30 + 2}{3} \div \frac{3 \times 1 + 1}{3}$

$\frac{90 + 2}{3} \div \frac{3 + 1}{3}$

$\frac{92}{3} \div \frac{4}{3}$

$\frac{92}{3} \times \frac{3}{4} = 23$